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Original Communications.

THE NEED OF A SEPARATE PRISON FOR CONSUMPTIVE CONVICTS.*

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Physician on the Board of Inspectors of Convicts for Alabama.

The importance of this subject, I am sure, justifies me in repeatedly bringing it before this association. The housing of large bodies of men, whether they be workmen in factories, soldiers in barracks or prisoners in confinement requires the best thought and the most careful attention.

If any class need more consideration in regard to the hygiene of his dwelling than another, it assuredly is the inmate of our prisons. He is compelled to occupy whatever accommodations the authorities provide him, and to endure whatever condition they may determine.

Dr. Rohe in his work on Hygiene says: "The mortality of convicts, even in the best regulated prisons where especial attention is paid to sanitary requirements of such buildings is three times as great as among workmen in mines, confessedly one of the most dangerous occupations." Confinement lowers the vital force and causes the system to yield more readily to disease. That disease which brings death to more convicts than all others combined is consumption. Rohe says it causes from 40 to 80 per cent. of these deaths. His estimate is for the United States as a whole. Animals placed in captivity die rapidly of this disease, which, in their native state, is unknown to them.

Among the convicts of Alabama, consumption prevails to an alarming degree, and the death rate from this cause is on the increase.

In Alabama, the record of deaths for State convicts covers a period of eighteen years. For the first half of this period, consumption caused 20.3 per cent. of the total mortality; for the last half it caused 42 cent. In

*Read before the Medical Association of the State of Alabama, April, 1900,

the penitentiaries of different States, of the total deaths, the per cent. caused by consumption is as follows:

These figures are from recent reports:

Mississippi, 20 per cent; Arkansas, 20 per cent; Florida, 30 per cent; Ohio, 31 per cent; Michigan, 33 per cent; Alleghany County Work House Pennsylvania, 33 1-3 per cent; Virginia, 41 per cent; Kentucky, 42 per cent; Joilet, Illinois, 70 per cent; Huntsville Penitentiary, Texas, 66 per cent; Rusk Penitentiary, Texas, 33 per cent; Washington, 16 per cent; Connecticut, 1898, 60 per cent.

In 1897 every death that occurred in the penitentiary of Connecticut was caused by consumption. According to the last national census, consumption causes 11 per cent of all deaths among our free population.

In regard to the propagation of this disease, our present knowledge justifies the following statements: Every new case of tuberculosis must be derived from another case. The disease can only be transmitted from parent to offspring by transmission of the tubercle bacilli. The offspring of consumptive parents under favorable environments, are less liable to have the disease than are men and women of healthy parentage who marry consumptives.

Flick says with regard to this disease: "The history of the tuberculosis in all times and in all countries is a broad demonstration of its contagiousness, and by inference of its preventability."

Osler recounts observations made under Koch's supervision, where dust was gathered from buildings in which consumptives were confined, and out of 118 samples, forty were infective and produced the disease in animals. Strauss performed the following experiment: In the nostrils of twenty-nine nurses and hospital attendants, he placed plugs of cotton wool to collect the dust of the wards. In nine of the twenty-nine cases, the cotton contained the tubercle bacilli and proved infective to animals. Prison management Alabama furnishes conditions specially favorable to the propagation of consumption. Convicts are not kept in separate cells but from fifty to one hundred are confined together in a single large cell. Consumptive convicts, unless acutely ill, are confined in the same cells with the well convicts.

An effort is made to cause those expectorating to spit into cuspidors containing a disinfectant, but this cannot be enforced. The results are, a prison atmosphere full of the germs of consumption, an alarming death rate from that disease and this death rate on the increase.

There is only one remedy for this condition, and that is to separate the consumptive convicts from the non-consumptive. We need something more than separate wards in the same building or separate buildings on the same grounds. We need a separate camp for consumptive convicts, the further from the other prisons the better, in order to give the non-tuberculous prisoners the greatest possible immunity from this disease.

With the organization of such a camp, and the exercise of painstaking care in detecting consumption in its early stages, and the prompt removal of such convicts to said camps; in doing this, we shall have accomplished all that our present knowledge of this disease points out as our duty in the premises. This would give the consumptive better treatment, and the well man a chance to remain well. In this matter, the duty of the State is plain. It has the right to deprive the offender of his liberty, but it has not the right to deprive him of his health. Think of the horrible fate of continuous confinement in the same room with a contagious and deadly disease. Such is the fate of every convict in Alabama today. To organize a separate camp for consumptives is the one great object I have sought to bring about during my term as director of the medical department of the State convict system, so far without success.

Our law makers are not fully alive to the gravity of the situation. It behooves us as physicians to continue to agitate this subject. I am sure Alabama is due this much to its prison population, whose labor is turning large revenues into her treasury. I am also sure that a humane and intelligent citizenship will endorse the administration that carries out the prison reform suggested in this paper.

Montgomery, Ala., August 11, 1900.

Dr. W. H. Blake, Wetumpka, Ala.:

Dear Doctor:—I have noted with interest your continued efforts to improve the sanitary condition of the prisons of our State. At each meeting of the Alabama State Medical Association for three years past, you have read papers directing the attention of the profession to this subject.

As physicians we do a greater service in preventing sickness than in treating the sick. This is specially the case with convicts, since that disease, tuberculosis, to which they are most liable is so little benefitted by medical treatment.

Your suggestion to separate the consumptive from the non-consumptive convicts meets my hearty approval. Yours fraternally,

J. B. Gaston,

Judge of Probate, Montgomery County.

Montgomery, Ala., June 19th, 1900.

Dear Dr. Blake:—There is a broad and elevated plane of humanity upon which the sympathy of all good and true men meet and mingle, and there are enterprises so saturated with the spirit of a generous humanity that the interest of all by a spontaneous impulse is focalized upon them. The establishment of a separate camp or hospital for tuberculous convicts, as you propose, is such an enterprise, and should receive the universal, active and generous sympathy, encouragement, and material aid

of the law-makers of this great commonwealth. An ideal place for such a camp or hospital is the unoccupied prison west of Speigner's which I inspected, when President of the State Medical Association, with the State Health Officer and yourself. It is well-known that no country nor people are exempt from the blight of the bacillus tuberculosis. That the most common mode of dissemination of this infectious disease is by tuberculous sputum becoming dry and mixed with dust and inhaled. It is certainly impossible to prevent contamination in this way where convicts are confined together as they are in the Alabama prisons.

In the opinion of that august body, the U. S. Supreme Court, "It is not only the right but the bounden and solemn duty of a state to advance the safety, happiness, and prosperity of its people, and to provide for their general welfare." How much greater is this obligation to that unfortunate class of citizens intensified by the fact that they are deprived of their liberty, have no option, and are denied the right of self-preservation. In justice to all good citizens the Legislature should enact a law for the isolation of convicts suffering with this communicable disease; for the greater the number of tuberculous prisoners that receive their freedom the greater the chances of dissemination of the disease among the law abiding.

Salus populi est suprema lex.

Very truly yours,

L. L. Hill, M. D.

Montgomery, Ala., June 21, 1900.

Dr. W. H. Blake, Physician Inspector of Convicts:

Dear Doctor:—I have read your paper on "The Need of a Separate Prison for Tuberculous Convicts," read before the recent meeting of the State Medical Association, and endorse the positions therein taken as being sound, and in accord with the most recent teachings of science as to the communicability of tuberculosis.

I have no hesitation in saying that the State has no moral right to force non-tuberculous convicts to breathe an atmosphere saturated with the infectious material of tuberculosis, or any other disease, and thus incur the risk of becoming infected themselves.

Hoping that you may succeed in bringing about the reform for which you have been, and are, striving, I am,

Very truly yours,

W. H. Sanders, M. D.

State Health Officer.

To Dr. W. H. Blake:

Tuscaloosa, Ala., June 2, 1900.

Dear Sir:—I endorse most heartily and urgently your suggestions of having the tubercular convicts separated from the non-tubercular, and isolated in separate buildings; without this, it is impossible to prevent the spread of consumption in our penitentiary and convict camps.

Respectfully

J. T. Searcy, M. D.,

Supt. Alabama Bryce Insane Hospital.

Ensley City, Ala., July 27, 1900.

Dr. W. H. Blake, Physician of Convicts, Wetumpka, Ala.:

Dear Doctor:—Your letter of recent date received. I have carefully read your paper and endorse the sentiment contained therein. Your efforts in this direction are in keeping with my own ideas and efforts upon the same subject. The convict bill which bore my name, endorsed by me in the Senate of 1896 especially provided for the separation and isolation of tubercular convicts. This is one of the most important subjects in the management of our convict system and I hope that your efforts in this direction will succeed. Very respectfully,

R. M. Cunningham, M. D.,
President Med. Asso. State of Ala.

Birmingham, Ala., August 16, 1900.

Dr. W. H. Blake, Wetumpka, Ala.:

Dear Doctor:—I take pleasure in giving you my views on the points which you make in your paper, looking to an improvement of our State prisons. You will doubtless remember that at the session of the State Medical Association, held in Birmingham three years ago I offered a resolution, endorsing the suggestion you made on the subject at that time, which resolution was unanimously adopted by the Association. In my message as President of the Medical Association of Alabama, recently held in the city of Montgomery, I again called attention to the importance of this question.

In my opinion, the physician of Alabama can do no greater service to this poor, unfortunate, dependent class than to urge upon the lawmakers of the State the great necessity for the adoption of such laws as may be necessary to carry out the plans as outlined in your paper. The fact that the death rate among Alabama convicts is so much higher than among our free population points out the need of investigation as to the cause and prevention of those diseases to which prisons are especially liable. Of these, consumption is first in importance.

As above stated, I heartily endorse your recommendations to establish a separate camp for consumptive convicts. It is broad and sound in principle. More than one-half the convicts of Alabama are located in this immediate section of the State, which gives us ample opportunity to verify some important facts, as set forth in your paper. It has also given me opportunity for observing the earnest and intelligent manner in which you have sought to improve the sanitary management of the prisons.

Yours very truly,

J. C. LeGrand, M. D.,

Ex-President Med. Asso. State of Ala., Editor Med. Jour. of Ala.

DIFFICULT LABORS AND THEIR MANAGEMENT.

BY THOMAS EDMUND DRYER, M.D.,

HUNTSVILLE, ALA.,

Junior Counsellor of the Medical Association of the State of Alabama.

Mr. President and Gentlemen of the Medical Association of Alabama:
Difficult labors occur in the second stage and the causes may be divided as follows:

Those relating to the mother:

- 1st. Exhaustion from tedious labor.
- 2nd. Want of uterine force or inertia.
- 3rd. Rigidity of the perineum.
- 4th. Uterine tumors.
- 5th. Deformities of the pelvis.

Those relating to the child:

- 1st. Ossification of the fetal head.
- 2nd. Preternaturally large head.
- 3rd. Monsters.
- 4th. Mal presentations.
- 5th. Mal positions.

The most frequent of these causes are uterine inertia, rigidity of the perineum and occipito-posterior positions. I shall take up each cause as classified.

First, Exhaustion. If we have a good presentation and position, the head not too long impacted in the bony pelvis, give a hypodermic of morphia, and atrophina, thereby stopping the pains and causing your patient to sleep several hours. You may then look for a favorable termination of labor, or if advisable, resort to forceps.

In uterine inertia, we should not delay in the use of the forceps, for if the forceps are properly adjusted and traction made in the right directions, there is no danger to either mother or child.

We find rigidity of the perineum most frequently in primipera. In treating these cases we frequently can obtain good results from heat applied to the perineum or placing the woman upon her side, stretch the perineum with two fingers in the vagina and pulling toward the coccyx. We may not accomplish our object by these means, then the only thing to do is to use the forceps. The patient must be well under the influence of chloroform and we should deliver slowly, making traction at intervals as there is danger of rupturing the perineum.

Uterine tumors are so seldom met with it is not worth while to discuss them fully, but should the tumor be so large that it interferes with the forceps delivery, it should be enucleated. Ferunculated tumors are generally so small they do not interfere with labor.

Deformities of the pelvis are so numerous, I will not attempt to enter into a description of them. The treatment is symphysiotomy or Cæsarian section.

Ossification of the fetal head is a complete or nearly complete closure of the fontanelles. As there is no yielding of head, attempt delivery with the forceps; if the attempt prove futile, the child should be delivered by symphysiotomy. Cæsarian sections or craniotomy should be performed if the interest of the mother is to be consulted. The only course to be pursued with preternaturally large head is delivery with the forceps.

The natural forces are sufficient to deliver monstrosities.

Under the head of Mal Presentation, we have transverse and brow. Transverse presentation, when seen early by the physician, can be remedied by introducing two fingers in the vagina or the whole hand if necessary, and while pushing up the breach with the fingers of the internal hand, push down the head with external hand. It has been my misfortune to be called by midwives to five cases of this kind in the past few years, but not until the hand had protruded from the vulva and had been in this position for several hours. The last case seen was in consultation with another physician, he having been called by a midwife. The woman had been in this condition two days. When we find such a condition of affairs the only thing to be done is to chloroform the woman well, introduce the hand, grasp the feet, turn and deliver. All these women recovered except the last case mentioned; she died the next morning. Of course none of the children lived. In brow presentations the head occupies a position intermediate between flexion and extension.

A brow presentation occiput-anterior if not converted into an occiput cannot be delivered naturally. The treatment should be to introduce the hand, grasp the occiput and flex the head, and the hand should not be removed from this position until the head is impacted in the bony pelvis. If we were to cause this to be a face we would have a mento-posterior which is also impossible to deliver, but should the brow present with occiput posterior, should we flex the head we would have occociput posterior, which we know is a very troublesome position, so then we must extend the head and make a mento-anterior. After we have made the manual manipulations we can use the forceps if necessary. We can also make use of podalic version in these cases.

Mento-anterior positions are not now looked upon with so much dread as by the older writers, as they are practically devoid of danger to mother or child. If delivery be too long delayed, forceps can be easily used.

In mento-posterior positions the conditions are more serious. This presentation and position can be transferred to occipito-anterior position in the following manner: The woman is thoroughly anesthetized, the hand introduced into the vagina, the fetus pushed up above the pel-

vic brim, with external hand make pressure upon the head of fetus so as to cause flexion, and when the head is allowed to descend there will be an occipito-anterior position. This procedure should be tried before embriotomy or ceasarian section is practiced. Of course these presentations can be remedied before rupture of Amni very much more easily.

Occipito-posterior positions are met with much more frequently than any other, and consequently we have to deal with them oftener. From this cause we have very protracted labors; if child be born without assistance, labor is sometimes lengthened for many hours. Many times after waiting, the forceps have to be used, but if the condition is recognized early, that is, before the rupture of the Amni, an occipito-anterior position can be obtained by external manipulations, but should our patient seem well advanced in the second stage, what should be done before using the forceps? Every obstetrician agrees to the use of two fingers to side of head, causing rotation, but should we fail, proceed as with mento-posterior position, by anesthetizing the patient, introduce the hand, raise the fetus and lower portions of the uterus above the pelvis brim; make rotation by turning the head, and at the same time grasp the shoulders with the external hand, turning the body of the fetus. Parry, who was the first to give an accurate description of this procedure, says: "When the woman is entirely relaxed by the anesthetic, it is surprising what can be done by pushing the head upwards; not only does the child ascend, but if the lower portions of the uterus have been carried with the head into the cavity of the pelvis, it may be lifted with its contents above the pelvic brim, when the latter becomes movable and easily manipulated. Both in the pregnant and unimpregnated woman the degree of stretching and movement of which the generative organs are capable when the patient is completely anesthetized appears very remarkable to one who has never employed this agent in such cases. Always use chloroform, as it produces greater muscular relaxation than ether.

In breech presentations we have a very slow labor. If the complete breech is present, it is better not to bring down the feet, but we must use every effort to prevent the arms from being extended and the arms must be kept flexed. Both of these may be prevented by pressure upon the uterus as the body is being born. We should make suprapubic pressure upon the head in order to keep it flexed, except when the occiput rotates in the sacrum, then we must have extension, so that as the occiput passes over the pelvis floor the chin may pass under the pubic bone. The after-coming head may be delivered with proper traction or by the forceps.

In knee or foot the management is about the same as breech, but in delivering the legs we may have made enough traction to cause the arms to extend, and if such be the case, we must, by introducing the hand into the uterus, and by a method of flexion, bring down one arm after another. In either breech or foot presentation the cord is subject to pressure and we must attempt to deliver as quickly as possible the after-coming head.

PNEUMONIA.

BY RICHARD MATTHEW FLETCHER, M.D.,

HUNTSVILLE, ALA.,

Grand Senior Counsellor of the Medical Association of the State of Alabama.

Mr. President and Gentlemen of the Medical Association of the State of Alabama:

I have selected for your consideration pneumonia. It is a subject of vital importance, particularly to the general practitioner. I will review the present and past pathology and treatment of this grave malady. In pneumonia the lung tissue is involved. As a rule one of three varieties will be found, (1) lobar, (2) lobular, (3) interlobular or interstitial. I will confine my remarks mostly to the discussion of the lobar form of the disease. I will use the terms lobar, croupous, or fibrinous interchangeably. This form of pneumonia, by many recent authorities, is regarded as an infectious disease and a specific fever, with lung inflammations as a local manifestation. Others claim that it is a pneumastic with resultant symptomatic or secondary fever. In acute lobar pneumonia the inflammation, usually, is confined to the lining membrane of the air cells of the lobe involved. However, in some cases the inflammation may extend into the bronchi. In lobular pneumonia the process is reversed; instead of going up, the inflammation travels down into the smaller tubes. Usually lobar pneumonia is an acute disease, though sometimes it is found in the lobar acute or chronic form. The exudate of lobar pneumonia is peculiar and consequently gives occasion for difference in terminology.

Rokitansky denominated it croupous. Virchow and others contend that the term croupous should be applied only to those forms resulting from, or associated with laryngeal croup; and in the ordinary form it should be called fibrinous, as the exudation is fibrinous, rather than croupous.

Hoffman, Flint and some French authors say these terms are all incorrect, and suggest pneumonic fever as the true definition. In the New England States and other parts of this country the disease is called lung fever. At a meeting of the New York Academy of Medicine, November, 1899, Dr. Andrew Smith read a paper on the pathology of lobar pneumonia as a basis for treatment, in which he gave some novel views and ideas in regard to the pathology of pneumonia. Dr. Smith said in using the term pneumonia he desired to restrict it to the form variously designated as lobar, fibrinous, or croupous. He says pneumonia is not an inflammation of the lung. He further claims that pneumonitis can be produced in a great many ways, and go on to suppuration and even gangrene without being pneumonia. He said there was one thing which, if introduced into the parenchyma of the lung would always cause pneu-

monia; and that thing was the pneumococcus. This fact, he said, would enable the doctor to sharply differentiate between pulmonary inflammation and pneumonia.

He says it is not enough to admit the infectious nature of the disease, and define pneumonia as an inflammation excited by the presence of a specific parasite. He says the parasite is always present in the lung, but it does not excite an inflammation. Though unique and interesting, time will not permit further citations from the doctor's paper.

At the present time it seems that the consensus of opinion is with those who contend for the infectious nature of pneumonia. When I was a student at the University of Pennsylvania, Professor Wood taught that pneumonia was an inflammation of the parenchyma of the lungs. However, the unprecedented activity of the medical mind during the last quarter of the Nineteenth Century has largely revolutionized medical thought; both theory and practice have undergone wonderful changes. Virtually traditional medicine has been thrown to the dogs.

I will now refer to some interesting points in the study and investigation of pneumonia. One fact is that the lower lobe of the right lung is most frequently attacked. Why this is so, is yet a subject for disputation. Those who advocate the infectious nature of the disease explain it in this way: They say the right primary bronchus being longer than the left, pneumococci are drawn into the right lung in greater abundance than into the left, and naturally they travel downward into the most dependent portion of the lung.

In tuberculosis it is affirmed that bacilli attack the upper part of the lung, rather than the lower lobes. Another point of observation is the fact that when an upper lobe is attacked primarily, it generally occurs among the aged or intemperate. This disease affects both sexes at all ages; men more frequently than women, chiefly owing to modes of living, habits and occupations. The lobar form of pneumonia occurs rarely between infancy and twenty years of age; frequently from twenty to thirty; less so from forty to sixty, and very frequently after sixty years of life. Loomis makes an astonishing statement when he says nine-tenths of all deaths after the sixty-fifth year are caused by lobar pneumonia. Lowered vitality from whatever cause predisposes to this disease. Improper and insufficient food, exhaustion from overwork, intemperance and ill-ventilated apartments are all potent factors in causing pneumonia. Secondary lobar pneumonia occurs mostly as an intercurrent affection during the course of some exhausting disease such as chronic malaria, measles, scarlet fever, typhoid fever and many others. This form of pneumonia is also secondary to epidemic influenza. In La Grippe, however, you will find mostly the lobular or interlobular forms. In any variety following grippe we have a serious complication; the tendency is to spread and involve new tissue much more rapidly, than in the ordinary form. This

has been my observation. As stated before, it is an intercurrent trouble, coming on at the time when there is lowered vitality and great systemic depression, caused by the specific poison of the primary disease, La Grippe. In other words, at the time when the system in a great measure has lost its resistive or recuperative power, thereby increasing the tendency to spread and involve new tissue, until a whole lobe or a whole lung or even more is involved.

In this form of pneumonia usually there are three quite well defined stages with characteristic pathological changes in each stage. In the first stage we find congestion of the lining membrane of the air cells, lasting about twenty hours. In the second stage, the affected air cells are obliterated, being filled with a fibrinous inflammatory exudation. At this time the lung resembles liver and it is called the stage of red hepatization, or the stage of consolidation. It is of several days' duration, and in favorable cases terminates by crisis, temperature falls and the breaking up of the inflammatory exudation begins.

The third stage of gray hepatization follows the crisis which marks the end of the second stage; duration is also several days, and in most cases goes on to resolution. This resolution in reality is the fatty degeneration of inflammatory products, and their subsequent liquefaction and absorption.

The symptomatology of pneumonia is generally well marked, usually beginning with a chill or with languor of shorter duration. From the start cough and pain are mostly present. Complicated with pleurisy the pain will be sharp, but is sometimes purely neuralgic. In either case the pain often extends back to the lower angle of the scapular. Fever sets in at once, with varied temperature, from 100 to 104 or 105 degrees F. The pulse is full and hard, ranging from 100 to 120 per minute, breathing quick, shallow and panting; disproportion in respiratory movement and pulse beat. In adults respirations may be 30 to 40, whilst pulse is not more than 90 or 100 per minute. Children suffering from this disease breathe very quickly. This rapid breathing is accounted for partly from pain and partly by the large amount of lung tissue involved, subtracted from the normal breathing area. The tongue is furred, skin hot and dry, flush on cheeks pathomonic. If there should be pleurotic involvement more or less cyanosis will be present. Congestion of liver and kidneys and hyperemia of gastro-intestinal tract not unusual. The characteristic sputa in color, is generally brick-dust, tobacco-juice or prune-juice. The foregoing are some of the most prominent symptoms of acute lobar pneumonia.

I will now give the physical signs of this disease. The crepitant rales are the only characteristic signs of the first stage. They are produced by the affected air cells and are heard at the end of inspiration.

In the second stage, on inspection, the respiratory movement will be found to be increased in frequency—shallow and panting. Respiration on the affected side is restrained, but increased on the sound side. Palpation shows vocal fremitus over the affected lobe markedly increased. This is the stage of consolidation or solidification of lung tissue. Solid lung tissue being a much better vibratory medium than the air cells, should on palpation show increased vocal fremitus. If from pressure stricture or any other cause the bronchi leading to the part should become so obstructed that the voice would be excluded, the fremitus might be diminished or even absent. The same is true if pleurisy with effusion exist over the solidified lung, so as to intercept the voice sounds.

Percussion in this stage, shows marked dullness over the consolidated lobe; the line of dullness does not change with position of the body. Auscultation at this time reveals bronchial breathing over the solidified lung. All the air cells are now filled with inflammatory exudation and the breathing has entirely lost its vesicular quality. At this time the vocal resonance is so concentrated and distinct that it is called bronchophony or bronchial voice. When articulate words can be heard it is termed pectorilogny, or talking from the breast.

The third stage is one of gray hepatization or resolution. It might with propriety be called the retrograde stage, or the return movement to the normal signs.

Now by inspection we will find that respiration is becoming natural and vocal fremitus much diminished.

Percussion shows dullness yielding to normal resonance. By auscultation we find vesiculo-bronchial breathing and increased vocal resonance. Until resolution is complete, crepitant and subcrepitant rales may be found. The diagnosis in pneumonia is not difficult, but the prognosis should always be guarded, as pneumonia is one of the most fatal of all acute diseases.

Having given the symptomatology and pathology of acute lobar pneumonia, I will now discuss the treatment from a theoretical and practical standpoint. Before 1850 the treatment was heroic; from 1850 to 1865 it was transitory. After that period it was expectant. There was a time in the history of medicine when certain principles and facts were thought to be pretty well established to serve as guides in the treatment of disease. The pendulum then kept pace with the ability of the medical mind to materialize its thoughts. We are now confronted with many remedies and with many plans or modes of treating disease, but no plan yet devised seems to have met with the popular favor once enjoyed by many old-time remedies. At the present time we are burdened with new theories, new ideas and new remedies to such an extent that a whole life-time would be too short to test the merits and demerits of the interminable category of remedial agents already presented for medical consideration.

Diseases come and go and change their type in cycles, from benign to malignant, and from malignant to benign. As observed in diphtheria, scarlet fever and other affections, the benign require little or no treatment, the malignant are mostly death-dealing from the beginning, change in type requiring change in treatment.

Recent research may have modified our views in the treatment of pneumonia, as well as in the treatment of other diseases. We may admit that lobar pneumonia is an essential fever with lung complications; that it is infectious and depends for its cause on a micro-organism, or non-infectious. Microbe or no microbe, the inflammatory changes are the same now that they were fifty or one hundred years ago, and amenable to the same treatment now as then. The morbid condition, the essential pathology we call inflammation, is now, as it ever has been, and is present somewhere and in some form in disease, constitutional symptoms giving expression to its type. Let us take pneumonia as a type of inflammation and give the means employed to combat the disease. The remedies chiefly relied upon in years gone by were vivisection and arterial sedatives, such as mercury, antimony, *veratrum viride* and others. At one time the profession entertained the belief that blood-letting relieved pain, reduced temperature, lessened the force and slowed the action of the heart; that it removed morbid matter from the blood, the product of inflammation. In congestion, if early resorted to, it might and often did arrest or abort inflammation, and after inflammation was established it checked its extension, promoted absorption and resolution and shortened its duration. Nevertheless, there are men today who not only oppose vivisection, but contend that it neither removes morbid matter from the blood or lessens the blood in the inflamed part, but that it does impoverish the blood and lessens its powers of repair, lowers general vitality, increases the hazards and delays convalescence. In times past the doctor had a lot of work to do with his lancet, blisters emetics and cathartics. These were his reliable forces and he was diligent in their use. In the palmy days of blood-letting the profession held it to be the remedy *par excellence* for inflammation, and claimed that it was potent for good.

In 1862 Professor Gross said general bleeding might justly be regarded as standing at the very head of the list of constitutional remedies for inflammation. He said it was the most sturdy and efficient means of relief. At another time he said, though bleeding is now denounced and no longer fashionable, if we formerly bled too frequently, too copiously and too indiscriminately, it is equally certain that the operation is not often enough resorted to at the present day. In my early practice, with restrictions we bled in the more serious affections of the three great cavities, head, chest and abdomen, the pulse and general condition of the patient were our guides. In the early stage of acute disease bleeding was the rule, not to bleed the exception. I venture the assertion that not one-third of the doc-

tors of today ever used the lancet or ever saw it used, notwithstanding the text books up to date both suggest and recommend its employment. The beneficial effects of extracting blood may be tested by applying a few leeches to an inflamed conjunctiva; in a short time the blood vessels contract and the inflammation subsides. Now then, if general bleeding will do for inflammation of internal organs, what we see cups and leeches do for an inflamed eye, there is virtue in blood-letting. Conditions seldom occur to justify the use of the lancet, in young children or the old and feeble. Its employment should mostly be confined to the robust and to the first stage of disease. I have fewer regrets for the use, than for the non-use of the lancet.

In pneumonia a pertinent question is: What does bleeding do? It lessens the volume of blood, allays nervous irritability, slows and calms the excited, irritable heart, so that it contracts more deliberately and causes the blood to flow placidly and smoothly through the arteries and with less force the blood is thrown into the inflamed part.

The most advanced pathological thought is neither opposed or antagonistic to vivisection. Professor Walsh says in the treatment of pneumonia, blood-letting has been numerically proven to diminish mortality and lessen the mean duration of the disease; also to curtail the duration of its prominent symptoms, both subjective and objective. Delafield in Pepper's work, in exudative inflammation of the lungs, recommends the employment of the lancet. Bartholow and Hare advocates blood-letting in pneumonia.

Dr. Alfred Mercer reports a very suggestive case. He says a middle-aged, well-developed man sustained crushing pressure of the chest by being caught against the door-jams of the round house by an entering engine, fracturing one or more of his ribs on each side of the chest. The shock and depression following were extreme. In a short time after the injury, reaction was fully established; high fever, strong pulse and labored respiration supervened. He was bled 24 ounces, with prompt relief to respiration. Next day the pulse was not so strong and full, but the respiration was much more labored, he was cyanotic, asphyxiated and unable to speak. The vein was reopened and 14 ounces more of blood was taken, after which respiration became full and easy, blueness disappeared and he began to talk. With the help of a few small doses of antimony for a few hours he went on to recovery. This man was in the presence of impending death and demanded immediate relief. What else but the lancet could have relieved him so very promptly. No other means would have been equal to the emergency. The pathological condition was congestion of the capillaries, producing blood stasis, closing the air cells and preventing oxigenation of the blood. The lungs and right heart were blocked with blood and the nerve centers were being poisoned and paralyzed.

It may be said that this was a case of traumatic congestion, differing somewhat from idiopathic disease and that similar cases are rare and seldom met with. All cases, however mild or severe, idiopathic or traumatic, pass through the same stages of development, fever, congestion, exudation and solidification, if not arrested in the beginning. Therefore, the indications for treatment are the same. In the case under discussion, venesection lessened the volume of blood, thereby taking a load off from the lungs and right side of the heart, giving both organs less work to do. Blood was not sent to the lungs any faster than oxigenation could take place, hence the congestion cyanosis and dyspnea were relieved and the man saved.

To confirm the statement above made, I will now discuss the chief points of interest in a case of idiopathic disease. Dr. T. I. Mitchell, of London, and his assistant, were hastily summoned at midday to see a man said to be dying; he was a cartman aged twenty-six years. Two days before his illness he was quite well. He was suddenly seized with difficulty of breathing, dreadful cough and agonizing pain in his side; his face was blue, extremities cold and pulse less at wrist. His feet and hands were put into hot water, and the doctor proceeded to bleed him. "What!" said the assistant, "bleed a man pulseless and dying?" "Yes," said Dr. Mitchell, "wait and see the effect." The arm was corded, and after two or three minutes a vein was opened. At first blood flowed drop by drop, but soon increased to a continuous stream and was allowed to flow till sixteen ounces were taken, with relief from pain and all prominent symptoms. In the evening there was some return of symptoms, when six ounces more of blood was drawn from the same opening, with permanent relief. As they walked from the house, the doctor's young friend declared that he had learned more of practical physiology, pathology and therapeutics, relating to the functions of the heart and lungs from this case and its treatment than he had gained in all his previous studies. The plans of treatment now employed and the remedies now in use for the cure of disease are so numerous and so various that one might question which, if any, have a particular influence in promoting recovery in pneumonia.

The sedative saline treatment, the coal tar derivatives, sedative and stimulating expectorants, salicylates, salts of ammonia, antimony, mercury, ipecac, veratrum, aconite, quinia, iodine of potassium, chloral, chloroform, creosote, oxygen, cold and hot water, alcohol, strychnia, opium, jackets of cotton and silk, serum therapy, and a host of others are now in vogue. In conclusion, after what I have already said, let me suggest that, as a starting point in the treatment of pneumonia, that we fall back to the old remedy that has stood the test of critical observation for more than a thousand years. I hope, if I have done nothing more, that I have to some extent proven the intrinsic value of venesection.

tion in the treatment of disease. In the preparation of this paper my purpose was to emphasize the importance of blood-letting. If in any way what I have written will be helpful to the earnest workers of this day and time, my object will have been more than accomplished.

THE EFFECT OF FLASHES OF ELECTRIC LIGHT UPON THE EYE.

BY DUNBAR ROY, A.B., M.D.,

ATLANTA, GA.,

Clinical Professor of Ophthalmology and Otology in the College of Physicians and Surgeons of Atlanta; Oculist and Aurist to Grady Hospital.

While some of the cases here reported occurred in my practice more than four years ago, they were recently recalled to my mind by reading Professor Haab's article in the July number of *Klin. Monatsblt. fur Augenheilkunde*, entitled "Traumatic Macular Changes Produced by Electric Currents." There have been perhaps more cases observed than have been reported, of temporary injury to the eye through intense electric flashes, but the rarity of such reports warrants the present presentation, which will at all events call attention to some of the lurking dangers of the electric light.

Case 1.—Mr. E., aged 29 years, one of the chief superintendents for the city electric light company, consulted me in my office at 1 p. m. May 20, 1895. The history given was that one hour previous, while trying to adjust some wires, two of them became crossed a short distance in front of the eyes, with the result of a blinding flash of light. For a few minutes his vision disappeared, but gradually returned, leaving only a marked burning irritation in his eyes, the reason for the present consultation.

On examining both eyes, a marked pink zone of injected blood vessels could be seen around the cornea. The conjunctiva of the lids was but slightly irritated. Vision in both eyes normal. He complained of only a smarting sensation about the lids and a slight amount of photophobia. The use of dark glasses, hot fomentations to the eyes and absolute rest for a few days was the only treatment advised. About two o'clock that night a telephone message was received saying that Mr. E. was suffering so much pain with his eyes that he desired me to come out immediately to his house. On arriving I found the eyes a little more congested than on the previous examination. He was suffering with violent aching pains in the eye ball. On close examination of the cornea, this was found to look a little hazy, a condition which was not present at the office examination. There was marked photophobia. Several drops of a 2 per cent. solution of cocaine were instilled into the eyes, and also a drop of a weak

atropine solution. In about fifteen minutes the patient was perfectly easy, and reported next morning at the office that he had remained so all night, and even then he was perfectly comfortable. On examination, the cornea was clear and all signs of irritation had subsided. His eyes rapidly returned to their normal state. No changes could be seen with the ophthalmoscope, although the symptoms pointed to a decided retinal irritation.

Case 2.—Mr. M., aged 18 years, also an employ of the Georgia Electric Light Company. The history of this young man was almost identical with Case 1, with the exception that he was not seen until two days after the injury. A similar electric flash took place just in front of his eyes, and he was also blinded for a few minutes. On recovering from the shock, he bathed his eyes in cold water, and with the exception of a slight irritation he experienced no discomfort. The irritation persisting, the company sent him to me for examination.

R. E., V.—20-30. Improved by no glass. L. E., v.—20-20. Decided ciliary injection in the right eye and very slight in the left. Pupils react to light and accommodation, but appear rather contracted. The cornea of the right eye appeared a little hazy. By ophthalmoscopic examination I must acknowledge that nothing very abnormal could be discovered, although the region of the macula in the right eye may have looked a little cloudy. Neither in this case nor in the first was any scotoma or contraction of the visual field to be found. The patient was ordered to wear dark glasses, use hot fomentations to the eyes and a drop of atropine solution was instilled into both. He had no further trouble, and vision in both eyes became normal.

The flash of light in both cases came from wires carrying a 500 voltage.

Case 3.—E. L., aged 32. Admitted to Grady Hospital on account of an accident similar to Case 2. This case was almost identical with the one just reported, both in symptoms and the treatment used.

A few cases have been reported where intense electric flashes have caused a temporary blindness and where the pathologic lesion has been a grayish discoloration in the region of the macula lutea. The action of the snow upon the eyes producing the phenomenon known as "snow blindness" is of no infrequent occurrence in the frigid zones, and the pathologic conditions there found are quite similar to those seen in the eyes which have been injured by electric flashes.

The subject of pathologic changes in the macula lutea due to traumatic causes was first given prominence in an article by Professor Haab, of Zurich, at the Seventh International Ophthalmological Congress, held at Heidelberg. Since that time Professor Haab and his associates have continued to study the subject and given at intervals further contributions relating to these traumatic changes,

In 1889 E. Meyer, of Zurich, delivered an inaugural address upon this subject, and in 1896, A. Siegfried, of the same city, and out of the same clinic, published an extensive article upon "The Traumatic Changes in the Macula Lutea of the Retina."

Intense light as the cause of retinal and conjunctival changes has been known to careful observers for a long time. Electric light as a cause is of comparatively recent date, and only since it has become so universally popular for domestic use. One has but to note the dazzling effect produced upon the eyes by the bright reflection from the snow, or the same effect produced when we gaze unaided by tinted glasses, upon the sun in partial eclipse, to realize how irritating and blinding such lights are to our visual members.

"Snow-blindness" has been known to ophthalmologists for years as also the blinding effect of bright sunlight upon the eyes. A very interesting discussion of this latter subject with an abstract of all reported cases can be found in an article by Mackeye, published in the *Ophthalmic Review*. He found that after exposure of the eyes to sunlight the patients noticed a dark spot in the field of vision. This, on examination, was found to be a positive scotoma which lasted for a certain period of time and then passed away. Mackeye also found that this also represented color-sciotomata extending over a large area. Such patients will often see objects twisted, producing the condition known as metamorphosia. The ophthalmoscope will sometimes show no changes, while in others a decided hazy condition will be found in and around the macula, occasionally with an accompanying pigmentation. Vision, as a rule, is reduced, and when this is marked, a recovery rarely takes place. Pigmentation of the retina caused by the action of sunlight has been adduced by Monoyer as a cause of the condition known as "retinitis pigmentosa."

Deutschman has shown by experiment that concentration of the direct rays of sunlight upon the retina of a rabbit produces a coagulation of the retinal albumen with an accompanying pigmentation. However, such an analagous condition could not be attributed to the action of the sunlight upon the eye. While the action of the sunlight from the snow produces a decided retinal irritation, it manifests its chief symptoms upon the eye by producing a severe conjunctivitis with sometimes a diffuse keratitis and ulcers of the cornea. It rarely leaves any bad results.

The effect of bright electric lights upon the eye has also been investigated and the results noted. Just what degree of brilliancy it takes to produce injurious effects upon the eye has not been definitely settled. It is true that the ordinary incandescent electric lights certainly seem the best for general illuminating purposes. It is brilliant, produces less heat and therefore less particles of combustion; is steadier than gas in many instances, and is the nearest approach perhaps to the daily sunlight.

However, I must say that experience in the use of the incandescent light and the Welsbach gaslight with proper shading has influenced me into a preference for the latter. Of course the latter is more troublesome to keep and therefore has its disadvantages, but when subdued by the use of white shades, it certainly makes a most excellent light by which to work. Personally I have used this light for years, and now prefer no other.

Hartridge, of London, in an article published in the *British Medical Journal*, 1892, on "The Effect of Electric Light Upon the Eyes," states that no bad results have ever been observed upon the eyes from the ordinary use of the incandescent light. Although since this publication I have seen no other reports to the contrary, personal observation prevents me from agreeing with the author referred to. A case recently under my observation could be attributed to no other cause.

Mr. H., aged twenty-four, night clerk in a hotel, consulted me last February, on account of a slight irritation in his left eye. History was as follows: Physically he was a perfect specimen of manhood. He worked every night as clerk and bookkeeper under the constant glare of the incandescent electric lights and slept during the day. Up to this time he had never had any trouble with his eyes. Gave absolutely no history of syphilis, nor could any signs be found on the closest physical examination. He had never been sick a day in his life, nor had he ever had the slightest touch of rheumatism. Had never felt better than at the present.

On examination the left eye showed contracted pupil, but no more than the right. It did not respond to light. There was only the faintest zone of circumcorneal congestion. Vision normal, but photobia was present. Right eye was normal. On using atropine in the left eye an incipient iritis was readily diagnosed. It was impossible to dilate the pupil ad maximum, although there seemed to be no points of adhesion. The iriti muscles appeared perfectly torpid. The case proved to be one of prolonged treatment, although at no time was the objective or subjective symptoms severe. Nothing was used but atropine solutions, hot fomentations and blisters to the temple. Leeches finally produced a most rapid amelioration of the symptoms. In this case there was no doubt in my mind that the cause of the attack must be attributed to the electric light. He worked for hours every night with an incandescent drop-light just in front and to the left, so that there was a constant glimmer, especially in the left eye. There was never any trouble with the right eye. Since that time he has had no further trouble, as he was transferred after recovery to day duty.

During the last few years there has been a number of young ladies under my care for ocular troubles who were boarding in a large school where incandescent lights were used. I have had to stop some of them from school, and in other cases I have substituted a student's lamp with the most gratifying results. My experience has been that these incandescent lights are not suited for a light by which to do constant work,

Hewitt, in the *British Medical Journal*, 1893, calls attention to a condition of the eyes designated as electric ophthalmia. The symptoms of this disease are said to be the same as those of snow-blindness, viz., swollen lids and congested conjunctiva, later followed by a muco-purulent discharge. This condition is usually found among those employed in electric welding operations, less frequently among those who use the arc lights.

Several cases have been reported of blinding or dazzling of the retina through intense flashes of lightning which show much similarity to those caused by electricity.

Professor Haab, of Zurich, was one of the first to call attention to changes in the retina, especially in and around the macular region from traumatic and constitutional causes, in an article read before the Seventh International Ophthalmological Congress, at Heidelberg, 1888, and in 1889, E. Meyer, from the same clinic, continued the study of the subject. These two writers discussed more in detail the vulnerability of the macular region to various causes rather than to any particular traumatic cause. Their subsequent writings seem more of a clinical demonstration of their views previously set forth.

In 1894, Dr. E. C. Rivers published a very interesting case in Knapp's Archives, on "Injury to the Eyes from Heavy Charge of Electricity." This case condensed is as follows: H. E., aged 25 years, employed as engineer in the motor house of the Denver Electric Car Company, accidentally made a short circuit by means of a small wrench in his hand, causing the full 550 volts to pass through his arm and out at the wrench, accompanied by a loud report and a very intense flash of light. The patient was stunned, and immediately had severe pain in the eyes.

Rivers saw the patient one hour after the accident, and found the following condition: Face, with eyebrows and lids, neck and hand badly burned. On examining the eyes, the conjunctiva was found strongly congested and the cornea of both eyes almost opaque. Vision equalled perception of light. Under the use of atropine, castor-oil and dry aseptic cloths, the eyes progressed well. On the third day the whole eschar on the cornea was thrown off and this being only the epithelial membrane the remainder was left clear. A few days later L. E., Vision equalled, 20-40; R. E., Vision equalled 20-100. The ophthalmoscope showed the media clear. The retina in the right eye looked hazy. Visual fields normal for all colors. Six months later the patient reported that he still suffered from photophobia and has to wear colored glasses. Is compelled to look very intently in order to see small objects. In my own cases the flash was not near enough to produce burning of the tissues.

Dr. L. D. Broose, of Evansville, Ind., has reported two cases of retinal irritation from electric flashes which correspond more in detail with my own:

J. H., aged twenty-four years, an employe of the electric street railroad, accidentally received a shock from one of the trolley wires and at the same time his eyes were subjected to a very intense flash of light. When seen five hours later the conjunctival vessels were found injected, the eyes suffused with ears, pupils contracted and the patient suffering with intense pain. None of the parts were burned. Patient was directed to stay in a darkened room, and a two per cent. solution of cocaine was used in both eyes. In twenty-four hours he was able to resume work.

F. W., aged twenty-three years, also an employe of an electric street railroad, struck a live wire with a file which he held in his hand, and immediately there was an intense flash and the patient was rendered unconscious, this latter condition persisting but for a short time. When seen a few hours later the patient was complaining of severe pain in his eyes. The balls and lids were found markedly congested. Pupils contracted. Treated in the same manner as the first patient, and in five days the patient was able to resume work. The ophthalmoscope showed nothing abnormal. No mention was made of the field of vision.

Professor Haab, in the July number of the *Monatssb. fur Augenheilkunde*, discusses anew this subject and reports another case whose clinical study presents some features of interest. As this article has not appeared in English, I will take the liberty here of making an abstract of the report:

H. W., aged thirty-four, machinist, consulted Professor Haab on August 9, 1895, concerning his eye, which had received a flash of light from a dynamo of about sixty amperes. He came the same morning immediately after the injury, because of dimness of vision noticed, especially in the lower field. He was stunned by the flash of light which was very near the eyes, and for a few moments he could see nothing. The right eye being nearer to the dynamo than the left, it was the most affected. The pain was severe in both, just as if needles were sticking them.

Examination: There was only slight irritation with some hyperemia of the conjunctiva of the right eye. Both pupils contracted, the right more than the left. The irides appeared normal. R. E., Vision equalled 3-10; no improvement with glasses; L. E., Vision equalled normal. The ophthalmoscope showed nothing abnormal. On the next day the condition was decidedly better. R. E., Vision equalled 3-10w.—O, 5d. equalled 3-6. On dilating the pupil the left eye showed nothing abnormal. In the right eye a very interesting condition was present:

1. Extending over the whole macular region there was a very fine milky discoloration so that the normal granular appearance was absent. In the deepest part of the macular center the discoloration was slightly less. A similar milky discoloration was nowhere present in the retina.

2. Running along the periphery of the retina could be seen a few yel-

lowish-white spots of irregular form and size about once or twice as broad as a large branch of the central artery. * * * Some spots existed also below the fovea, the latter being quite fine. In the middle of the fovea two very small bright specks were found. Whether these small spots were in the retina or in the pigment epithelium, could not be determined. However, they were nowhere as white as those found in diabetes or albuminuria. Along the retinal vessels and on the papilla nothing abnormal could be found. The lens and vitreous were normal. The treatment consisted in absolute rest and the wearing of dark glasses.

August 16, R. E., Vision—3-6W. 1D.; L. E., Vision—normal. The macular is slightly opaque.

October 13, the eye appeared normal. No sign of cataract.

These cases, as well as the subject itself, are of interest to the ophthalmologist as affording clinical data upon which to base a prognosis whenever such accidents should come under his own professional care. Since electricity has become so universal in domestic use, accidents referable to it as a cause will necessarily be more common. The prognosis in all diseased conditions is determined by clinical experience, and hence the greater the number of cases reported the more certainty there is for a basis of deduction. The writer of this article does not lay claim to any original investigation, but purposes to bring forth from others their own personal experience. In the study of the cases reported there are many points of interest involved, and chief among them as to whether the changes produced in the eye had a chemical or traumatic basis. This point certainly opens up an interesting field for investigation.

Another point to be noted was the universal presence of two symptoms in all cases, viz.:

1. The contraction of the pupil from the retinal irritation which was so strong that it persisted for days.

2. The pain present always came on several hours after the accident.

The action of electric flashes upon the eyes is always classed as traumatic. Widmark has made some extended researches as to ocular trouble due to the exposure to electric lights. From these he concludes that such are produced by a direct irritation of the parts affected, and that this irritation is produced almost exclusively by the ultra-violet rays, which, as is known, exert a similar influence upon the skin. This would raise an interesting question as to whether this same cause was not also the active one in the production of those skin lesions following exposure to the H-ray. Widmark has also found that such rays can also produce stirred opacities of the lens. If such then be the case, it is justifiable to conclude that domestic lights are injurious to the eyes in proportion to the amount of the ultra-violet rays they contain. According to my own observation the Welsbach Gas Light has proven more satisfactory and less injurious as light by which we may read and work than any other of

which I have had any experience. It might be of interest to some of you to know the *modus operandi* of the Welsbach light, a name given after Baron Auer von Welsbach, who first discovered the principle of such illumination. This light is produced, as you know, by ignited gas passing through a thin conical, veil-like body called a mantle. It is on the order of the calcium illuminator. The mantle being heated radiates a steady, strong white light. The chief point is therefore in the connection of these mantles. A recent writer tells us that the mantles are made "saturating a fabric with a solution of rare mineral earths and then burning out the fabric leaving a delicate crystalline skeleton. The rare earths considered most effective are thoria and ceria, and they are contained in mineral mozarite deposits of which, from having been almost worthless thirty years ago, have now attained great value." The writer also adds that "attempts have been made recently to make mantles on another than the Welsbach principle of saturating a fabric then burning it out, namely, by making the ingredients into a paste with some gummy substance, drawing it out into threads and then weaving it into fabric and burning it out as before." In conclusion, I would say that when the Welsbach is used for reading purposes, there should always be an under shade, preferably white, so that the intensity of light may be mitigated.

NOTES ON SOME REMEDIES OF RECENT INTRODUCTION

By H. A. MOODY, M.D.,

Professor Materia Medica and Therapeutics Medical College of Alabama.

Tannalbin and Tannigen are two drugs of recent introduction that have proved to be remarkably useful within their proper limitations. As the writer's experience has been confined principally to Tannalbin, that drug alone will be here considered. It is a brown, light, slightly gritty powder, tasteless and odorless. A pinch held in the mouth will slowly dissolve in the saliva without imparting any noteworthy flavor or feeling to the organs of taste. No astringency of a sufficient degree to indicate its origin will be detected, yet the drug is one of the most certain and satisfactory intestinal astringents at our command. The basis of action is theoretically the insolubility of the drug in the secretions of the stomach, and its change into tannic acid and albumen in the alkaline contents of the small intestine. There is room to question the accuracy of the explanation, but the fact undoubtedly remains that in Tannalbin we have a means of securing the astringent and antiseptic effects of Tannin in the intestinal tract without the irritating effect upon the stomach so frequently produced by that agent. Patients who do not tolerate Tannin in its unmodified form will take it freely in the combination known as Tannalbin. Being so nearly tasteless, it is readily taken by children, a little sugar and water making an acceptable vehicle. It is harmless, and

can safely be entrusted to untrained nurses. Crudely speaking, its efficiency is directly in proportion to the amount administered. A child one year old can be given a grain an hour if needed, though longer intervals can usually be directed. Its use has rendered the treatment of the summer diarrhœas of children more satisfactory to the writer than ever before. Of course it cannot be depended upon alone. The intestinal tract should first be swept clean with eighth of a grain doses of calomel, guarded with five-drop doses of Tr. Opii Camph., and followed by teaspoonful doses of castor oil. Pain or nausea are controlled by chloroform water, a few drops of the chloroform being sufficient for half a pint of water, which can be given by teaspoonfuls ad libitum. The abdomen should be kept warm by a flannel bandage, and the diet rigidly prescribed. But as soon as the bowels have been cleared of the irritating matters generally present, the administration of Tannalbin should begin, and the promptness with which it diminishes the serous exudations that are so prone to persist, is evident not only to the physician but also to the parents. "I must have the prescription for those brown powders to carry home with me," is a demand that almost invariably follows their use.

In the chronic diarrhœas and dysenteries of discharged soldiers, the writer has found this drug of great service. In such cases it has seemed to do better in something like the following combination.

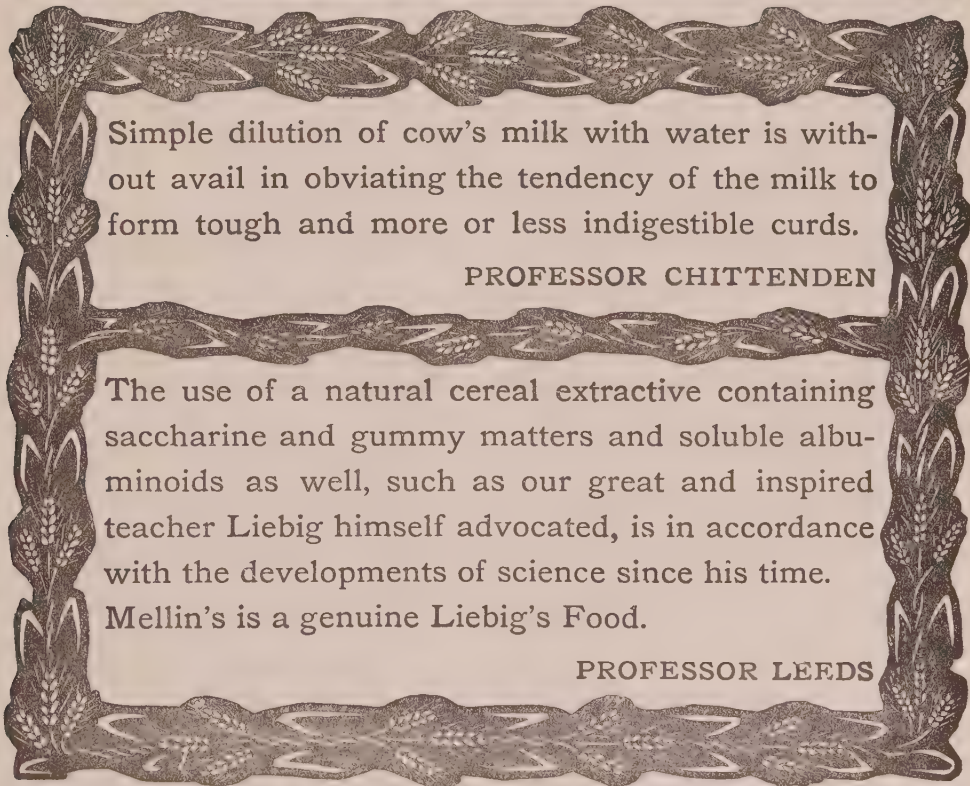
R Tannalbin ʒii.
 Bonjeans Ergotin gr. xx.
 Ext. Nux Vomica gr. iv.
 M. Make Capsules No. xxx.
 Sig. One every two hours.

Of course the diet should be carefully regulated. In these chronic dysenteric cases there are often small patches of ulceration in the rectum, easily touched with Nitrate of Silver stick through a rectal speculum, thereby greatly accelerating a cure.

The writer gives an opiate only when urgently needed, and then by itself, and never in combination with other medicines. Thus it can be used or omitted as required without interference with the more radical and important treatment.

As a variation from the above prescription, the writer has found satisfactory results from a capsule containing four grains of Tannalbin and three of Guaiacol Carbonate every two hours. This is especially useful in the diarrhœas dependent upon intestinal indigestion, and those attending tubercular affections. In the latter cases of course palliation is all that can be hoped for. The writer has had no experience with Tannalbin as a general astringent, his observations having been confined to its local effects upon the mucous membranes of the digestive tract. Upon these its therapeutic influence has been entirely satisfactory.

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Alimentary Elixir, "Harts," is made from selected Beef by pre-digestion, dissolving entirely the fibre of the Beef, transferring same in peptonoids. Its use is first recommended for re-convalescents, where a tonic-stimulant is indicated, and for the sick where solid food cannot be ingested.

Unlike most of the liquid preparations of beef, which contain only that portion of meat soluble in water (or in other words, the stimulating portion of meat), in contains also the fibrin or nutritious principle combined with the stimulating juice and salts, and is free from fat. It is most grateful to invalids, and is particularly adapted to convalescents in recovering from debilitating fevers and other diseases.

It is not a patent or secret medicine in any sense, and furnishes the physician with a perfect food stimulant.

Bismuth Cream, "Harts," is a Sub-Carbonate Bismuth, in a very fine state of division, kept fluid by an excess of water, a portion of which may be noticed when the bottle remains at rest for some time. Our Bismuth Cream represents pharmaceutical skill of the highest order, and, we believe, has never been successfully imitated. Kindly examine it microscopically, comparing it with Boric Acid or some other "impalpable" powder.

One teaspoonful represents, or is the equal of five grains of the sub-nitrate. It is employed for its soothing, sedative, and feebly astringent influence upon the mucus membranes, and can be combined with alkalies, anodynes, astringents, etc., but not with acids; try it with Tincture Opium and Tincture Kino or Catechu, or with Rhu-barb and Pancreatin.

It is useful in sub-acute gastritis, gastralgia, pyrosis and allied stomachic diseases, irritation of the intestinal and urethral mucus membranes, Diarrhoea, Dysentery, Leucorrhoea, Gonorrhoea, etc. It is suggested to use egg albumen mixed with Bismuth Cream for injection in catarrhal conditions.

Hematic Cordial. "Harts." A permanent and perfectly neutral solution of Iron and Manganese, Peptonized.

From recent experiments synthetical hæmoglobin seems to produce identical results with the natural, such a hæmoglobin builder is Hematic Cordial, which has none of the unpleasant properties of Iron, it is neither acid nor astringent, and does not affect the teeth, nor disturb the stomach of the most delicate. It will be found more efficient than other remedies in Anæmia, Chlorosis, Malaria, or any other disease in which the red blood corpuscles are lessened or afflicted, it is compatible with all drugs except acids.

Liquor Antiseptic. "Harts." Our LIQUOR ANTISEPTIC (which is compounded in accordance with the late Prof. Lister's formula) has become quite a favorite with the medical fraternity, and is in exclusive use in some of the leading Hospitals. We claim all for it that its uses demand by the profession. We beg to call your attention to the fact that it has full strength, and contains but a small percentage of alcohol.

HARTS MORRHUVIN, (or Wine of Cod Liver Oil), "Plain."

"	"	"	"	with "Pepsin."
"	"	"	"	with "Beef Juice."
"	ELIXIR "CASCARA, active with Pepsin."			
"	"LACTATED PEPSIN."			
"	SYRUP TASTLESS QUININE (any strength).			

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Selected Articles.

HUMAN TEMPERATURE IN DISEASE.

BY NORMAN BRIDGE, M. D.,

LOS ANGELES, CAL.

Read before the Association of American Physicians, Washington, D. C., May 3, 1900.

We are always seeking for symptoms that tell the exact nature of the diseases of the human body. If there were idiopathic signs the people would learn many of them, and hardly need doctors, except for the mysteries of treatment; and even these they would more or less master in time, as now they often think they have mastered them. The doctors are alert for the smallest hint of a new sign that can show without error the goings-on in the sick body. The treatment of disease troubles us rather less than the diagnosis; and we are usually more chagrined at our errors of diagnosis than at blunders of treatment.

The temperature of the body in health is maintained at a given point, with slight fluctuations, in all climates and conditions; and it fluctuates peculiarly in disease, and probably with some approach to a typical manner. How these mutations may be discovered and so the clinical thermometer be made more effective in practice has been a long search of the profession.

The temperature of the body in health is kept near a normal line by a regulating mechanism somewhere in the nervous system. More heat is usually made by muscles and glands than is necessary, and the regulation point is chiefly maintained by varying loss of heat, due mostly to the changing size of superficial vessels produced by the muscular fibers in their walls. These fibers are controlled by nerves, and so by nerve-centers.

In fever there is a regulation point as truly as in health, only it is higher and less constant. With its rise and fall there are frequently attendant symptoms that are curious and paradoxical, although probably conservative, as the subjective sensation of cold with a rising temperature and of heat with a falling one. It is not true that more heat is generally produced in the body in fever than in health under full exercise, but the contrary. It is only the regulation point that always rises.

What makes the regulation point rise? Why do the nerve-centers controlling the heat manufacture and dissipation change their force and action under certain influences which we call causes of disease? These questions go at once to the core of the clinical phase of the subject.

Doubtless several pathologic conditions produce the rise of the regulation point, and the accidents to these factors may cause all of the fluctua-

tions. There is no great change in the regulation point below the normal; whenever, therefore, we speak of a change we mean a change above the physiologic par, and that is fever. Yet there are disorders, of a chronic sort mostly, in which the temperature is for weeks or months slightly below normal at certain or all times of the day. Myxedema is one of them.

The tendency of professional thought is now toward attributing all fever to certain substances in the blood produced by microbes on to the microbes themselves. The proof of such toxic influences is overwhelming, but they are not the sole causative forces. And if we shall ever be able to catalogue all the causes we shall need to discover the one essential factor in the complete solution of the question—namely, the manner in which the nervous regulating machinery is ultimately affected by toxins or what not.

In studying the fluctuations of temperature we may profitably set a few things we know over against some that we do not know, and so hope to gain some practical lessons for the more efficient care of the sick.

1. We know that pus poison—that is, the micro-organisms of pus and their products absorbed into the general circulation—causes fever. We probably often encounter fevers that we fail to understand, which are due to small accumulations of pus hidden away somewhere in the body; but that is no justification for the assumption that in every inexplicable prolonged fever such a source of poison must exist.

2. Dead tissue, as the products of changes in greatly overworked muscles, albuminous bodies set free from these tissues, and floating in the blood, probably cause fever.

3. Slight elevation of temperature is produced by absorption of albuminous toxic substances from cyst cavities in various portions of the body, as the skin, the scalp, and the ovaries, that leak into the connective tissue about them and undergo absorption. These are not the products of pus poison.

4. Then we know that certain poisons, almost positively microbic, are taken into the body from the air, or in food and drink, and produce fevers—with possible eruptions upon the skin—which run a distinct course and terminate spontaneously if the patient lives. The fever begins after a period more or less definite—an average of perhaps a week—of so-called incubation, and often begins suddenly. Probably a certain amount of the poison must be introduced to cause fever, or some especial susceptibility must exist to make possible the cycle of events referred to. The theory seems plausible that the self-limitation of these diseases is due to the rapid accumulation in the body of the products of the microbes, first depressing, then destroying them; or that the microbes, by some reaction of the physiologic forces of the system, provoke the formation of a toxin capable of destroying them in a few days. This class of

diseases includes, of course, typhoid, typhus, scarlet, and yellow fever, measles, German measles, whooping-cough, varicella, variola and its modifications, pneumonia, plague, diphtheria, erysipelas, follicular tonsillitis, possibly acute rheumatism, and unnumbered other and yet unknown diseases. The list is not complete, nor will it be probably for many decades to come. We shall go on, as we have done, discovering new diseases out of the symptoms that have been the common but misinterpreted observation of centuries.

5. We know that high temperature results from certain conditions of malarial organisms in the blood, the forms of fever differing with the life-history of the plasmodia. Here, too, personal susceptibility plays some part in the process; all people do not resist or succumb alike, nor do all who are affected suffer alike, either in manner or degree.

6. High temperature of the environing atmosphere, with or without the sun's rays, under certain conditions causes alarming pyrexia known as thermic fever or sunstroke. It is probably due to inhibition or stimulation of some of the heat centers or other part of the heat-regulating machinery. But microbes have even been accused of inducing these cases, and it is not very unlikely that toxins are produced in the tissues by the heat and disturb the regulating centers, and so cause fever as the toxins of bacteria do.

7. We know that inflamed follicles of the tonsils may cause sudden high temperature, lasting a few days and subsiding spontaneously, while the same sorts of microbes are found within them that are discovered in normal follicles. How far this fever should be attributed to pus poison is unsettled.

8. Inflammations in general are attended with fever. Formerly we thought they always produced the fever; but now we know the two events are frequently co-results of some other causative influence. Where some irritant, applied locally, depreciates the vitality of a part, and inflammation results, and then fever, it is rational to assume that the microbes of pus may find there a culture-medium, and infect the system as they do from an abscess. But when, as in the pneumococcus infection, we know a fever precedes the inflammation in the lung, it is clear that the microbe poison in the blood does the whole mischief. And nobody knows how much of some toxin may find its way into the circulation as the result of an inflammation and help to cause fever.

9. We know, but usually forget that the commonest serious diseases of the kidneys are free from fever as well as from backache; that practically no disease of these organs causes fever save the rarest and some what questionable acute parenchymatous inflammation of the renal or the perirenal tissues, and that in general only those with calculi cause pain in the back. Bright's disease fails to do either in any of its multifarious forms.

10. We do not know how much fever is caused by tuberculosis apart from that due to pus microbes encouraged to grow by the tissue necrosis, which is nearly always induced by this remarkable disease, and to absorption of products of the necrosed tissue itself. Pure tuberculosis may, but usually does not, cause fever under circumstances that permit us positively to exclude the presence of pus products or those of inflammation or necrosis, whatever they are, except where the tissues of or about the central nervous system are directly involved.

11. We do not know why fever rises or falls rapidly or slowly. There are ingenious theories about it, but no proof.

12. We lack positive information to explain the genesis of many cases of fever which occur suddenly in children—and occasionally in adults—and are connected in some way with gastro-intestinal derangement. The difficulty is that at times apparently exactly similar disturbances are unattended by fever. An easy claim is that ptomaines from decomposition of intestinal contents cause them. It may be that a part of the cases are so caused, but as to many of them it is unproved and appears unlikely. The symptoms of constipation and diarrhea, of pain and swelling, are, so far as any clinician can tell, exactly the same a hundred times—and even many times in the same patient—when no fever occurs. It is easy to say that the fever must be due to some peculiar chemical or vital change not present in the other cases; and it is true that if abnormal metabolism within the digestive organs or elsewhere can cast into the circulation such substances as pepsin, peptones, albumose, fibrin ferment, or diastase, fever is produced. That such events do occur in these cases is largely conjectural.

13. We may fairly be in doubt to what degree nervous perturbation alone can cause fever. In a pus-poisoned patient, or one with an essential fever or tuberculosis, where there is even a trifling elevation of temperature, this is often made worse by mental excitement or by work. Can the excitement alone produce it when no poisoning exists? Probably not, since the gratest mental excitement—grief, fear, joy, anger—in a well person usually causes nothing of the sort. And in the cases where the fever is produced or raised by activity, is this due to the nervous excitement or to physical labor? A patient with tuberculosis or pus absorption, who keeps perfectly quiet in body and mind, may have a maximum temperature of perhaps 100 F. some time in the day; but a walk round the block or a business discussion of half an hour will carry it to 101 or 102. This is so well known that in sanatoria for consumption the rule is general that only patients wholly free from fever are permitted to exercise.

It seems impossible to deny that psycho-neuroses may disturb the heat-regulating machinery and produce positive fever. But the apparently fabulous fever reported of certain cases of hysteria is subject to honest

doubt. Many physicians even deny that pure hysteria can cause fever. But the pronounced paralysis of motion and sensation, the spasms of several kinds, the hyperesthesias, and the erratic aberration of functions of almost every sort and degree, known the world-over as the result of hysteria, ought to make it easy to believe that the heat-centers may be involved as well. And if hysteria can effect them, then there is no limit to their possible degree of aberration, except the capacity of the tissues to produce and husband heat, and their tolerance of high temperature without coagulation.

14. There are numerous slight attacks of fever that seem inexplicable. They are short and have few or no focal symptoms or signs, and no evidence of microbic poisoning save in the mere phenomenon of fever. That this fact is some evidence can not be denied. But if the reasoning is sound, then it is fair to assume that hitherto unknown microbes—or their life-history—capable of producing definite febrile action are yet to be discovered. Time was when rotheln was some erratic form of measles; now we know it to be a specific and probably microbic disease, differing wholly from the latter and protecting its victim as measles does. Time was when myxedema was a freaky form of dropsy; now we have its perfect explanation—with what glory to modern pathology every one knows; and cretinism is analogous to it. Why should we not expect to find that other specific diseases have been occurring under our eyes and observation for years without our knowing it? And why should we, every time we are confronted with one of these inexplicable fevers, attempt to make it fit some of the grooves of known febrile disorders, as typhoid or malaria, or be unhappy if we can not? The effort to do this leads us often to hazard a diagnosis that, being false, we are forced to change in a few hours, or that we foolishly feel compelled to stick to throughout the case, to our discomfort and loss of self-respect. And we gain little, save with a peculiar portion of the public, when we load our uncertainties off upon some convenient scapegoat, the existence of which can neither be proved nor disproved. Formerly the scapegoat was malaria; now that malaria is so perfectly demonstrable, it is oftener grip—that can not be demonstrated; for the necessities of a scapegoat require that it shall be airy, indefinite, and incapable of proof.

During this very season numerous cases have occurred in many states, of suddenly oncoming fever, lasting two or three days, with slightly swollen, red pharynx, and no apparent follicular inflammation. The general malaise, weakness, and perhaps headache of the fever state have come and vanished in this brief period. Perhaps these cases were the true influenza; perhaps some other zymotic disease as yet unidentified.

The clinical significance of fever depends on other circumstances than the fever itself. High temperature, per se, is of small account. With a spot of sharp abdominal tenderness or rigidity of muscles, or with uncon-

sciousness or spasm, coming on with fever, it may mean very much, as may a long-continued slight elevation of temperature without focal symptoms. This last leads us, especially in chronic cases with slight indisposition, to hunt long and faithfully for the cause. Clinically it is a valuable pointer.

The temptation among practitioners to treat the fever state is almost irresistible, but it should not ordinarily be treated. The wholesale medications often used for this purpose is mischievous in the extreme.

If unconsciousness or convulsions attend high fever, showing brain involvement and perhaps a paralysis of some of the heat regulators, the temperature should be promptly reduced by baths, for through this act directly, or by some increased elimination it produces, the convulsions usually cease, and consciousness returns. It is not true that fever of moderate degree must be brought down at once; fever often endures for a long time with little harm, as is shown in many cases of tuberculosis of the lungs, in which a slight daily elevation of temperature may persist for months with little impairment of the strength or general physical condition. Slight fevers may occur daily with no cachexia for a long time; the system becomes adjusted to it and the secreting organs are little disturbed.

A very high fever, or one that produces marked head discomfort, or great restlessness may not improperly be reduced by means of coal-tar preparations or the application of water. But it is not proved that in typhoid or other fevers the antipyretic drugs for any ordinary febrile temperature have shortened the attacks or increased the percentage of recoveries, and the habit of using them for this purpose has undoubtedly done much harm and very little good.

Probably the drug most extensively used for lowering fevers during the last thirty years—notwithstanding the free prescribing of the coal-tar preparations—is aconite; yet to this hour I am ignorant of any proof whatever that this drug can lower the temperature of fever, except by injuriously lowering the vitality of the patient. It may slow the heat and lessen nervous perturbation; but that is quite another thing.

We often find ourselves considering in the most serious manner as a grave thing the direct effect of a temperature of, say 102 F., and lasting for a few hours or for a day. And we have connived at the belief by the lay people that such a fever is dangerous. If placebos are needful for the morale of the patient, there is no objection to giving some innocuous thing ostensibly for the fever, but for doctors to regard it as necessary on other grounds is unscientific and poor practice. A free catharsis at the beginning of sudden fever often gives a sense of relief, probably by removing ptomain and other effete matter from the intestines, and in this or some other way removing congestion—or a sense of it—from the head. But except by removing ptomains there is small proof that it

lowers the temperature; and evidence of this latter even is not of the best.

It is, of course, always in order to attempt to remove or destroy the causes of fever. Some of the more tangible ones, especially those of a surgical character, we may deal with effectively. We may evacuate effete matter from the alimentary canal and increase the toxicity of the urine, which it seems clear is one of the eliminative effects of the Brand treatment of typhoid, although many forms of treatment may help the system to free itself from the toxic influence.

The service of this sort which we can render is very sharply limited, and may be roughly indicated as follows:

1. Pus-pockets, suppurating surfaces, and cysts leaking into the connective tissue, and so reaching the general circulation, may sometimes be evacuated or removed.

2. Inflammation may be assuaged, cured, or waited for.

3. Ptomains in the alimentary canal may be evacuated by a cathartic if they do not directly bring on a remedial diarrhea.

4. Malarial plasmodia may be effectively dealt with; and we have, fortunately, one drug proved to have a positive action against these parasites.

5. The causes of the essential fevers, that obviously consist of specific microbes which run their course in definite periods, are usually destroyed by the conservative havoc wrought by the products of the microbes themselves. No drug is capable of destroying them, and, on the basis of present knowledge, it is idle to medicate by such means. But we are beginning to know that the destruction of these poisons is possible by artificial means acting like the physiologic forces. The success already attained in a few diseases, most notably diphtheria, is crucial proof of the possibilities in this direction, and is reason for the faith that we shall soon be able to deal with many diseases in the same way. This is the direction the efforts of every clinician ought to take, and we await the beck of the votaries of bacteriology and pathology.

It is hard to keep the practising part of the medical profession plumb, as it is the lay world. We easily drop into habits of prescribing for insignificant things, to the neglect of the few indications that make for the patient's better comfort and greater prospect of recovery—the two objects that alone justify the existence of doctors. We give aconite or other drugs for slight fever and to bring down the pulse; digitalis, because the pulse is weak at the wrist—even when the weakness is apparent and not real, but due to the muscular and nerve fibers of the vessel-walls; we give calomel to clean off the tongue; prescribe for dry and rough skin and for cold, clammy skin, and for temporary dark coloration of the urine—and all as though such things were consequential and not the necessary, harmless accompaniments of many sicknesses of all shades of severity. Worse, we often prescribe thus to the injury rather than the

benefit of the patient, and by pursuing such methods hide from our own eyes the manner of reasoning that means growth and the measures that, beside being scientific, are genuinely useful for the health and longevity of the sick.—Journal of the Am. Medical Association.

THE DISEASES OF THE BLOOD IN THEIR RELATION TO SURGERY, AND THEIR TREATMENT.

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As surgeons, we have to consider altered conditions of the blood from a twofold standpoint. We see them either as disturbances affecting the general health of our patients, and bearing a more or less complicated character, or as a direct result of actual hæmorrhage due to pathological, accidental, or operative processes. In other words, we deal with anæmias due to imperfect or insufficient formation of the elements constituting the blood, and with anæmias due to prolonged or sudden copious bleeding. The study of these conditions, from the surgical point of view, is extremely interesting, by reason both of their great frequency and of the fact that most of them are so distinctly relieved by appropriate treatment. As a matter of fact, we are better informed as to the therapeutics of anæmic troubles than in regard to the pathological states which give rise to them, and our knowledge of their ætiology is limited to the simple understanding that the blood, not being independent tissue, can be modified only by changes affecting primarily other elements of the animal economy, except in the case of the direct introduction of toxic substances within the blood current.

The histological and chemical changes to which the blood is subject have in the last few years been studied so persistently and accurately that the diagnosis of blood diseases is as subservient to laboratory investigation as that of certain infectious diseases is to bacteriological research. But, while paying the strictest attention to blood count, to the estimation of hæmoglobin, and to the microscopical appearance of the globules, we must acknowledge that even these means of investigation sometimes prove somewhat insufficient, and that we occasionally are unwillingly compelled to remain in the dark. We know, for instance, that among cases of so-called pseudo-anæmia some of the patients have what we might call a natural normal pallor, which is sometimes very pronounced, although the examination of the blood reveals the fact that, so far as we can find out, nothing is amiss with it. In these cases the administration of chalybeates may be followed by no changes whatever in the blood count or the percentage of hæmoglobin, and by no modification of the pallid

appearance. Again, in other instances, while the blood seems normal, iron certainly diminishes the outward anæmic appearance, without changing the composition of the blood in any appreciable manner. And these patients, while possessing what to us appears to be normal blood, often present many of the symptoms of distinct anæmia. A possible source of error lies in the fact that the blood count may be greatly changed at decidedly short intervals by a greater or lesser dilution of the blood, due to rapid increase or decrease in the amount of body fluids: but we can nearly always make due allowance for such a state of affairs. The class of patients in which the diminution of hæmoglobin is proportionately greater or smaller than that of the corpuscles furnishes some rather obscure cases. In general, however, careful examination gives us very certain and very useful data.

The forms of anæmia which appear to be due to the immediate effects of infectious conditions are also of the greatest interest to us as surgeons. In these forms we know that there often occurs a true anæmia, but we are also aware that this is complicated by the addition, within the blood mass, of toxic products which commonly increase to no small extent the globulicidal action of the serum.

In our investigation of the blood for diagnostic and therapeutic purposes we may deem it sufficient to obtain an accurate blood count, to estimate the percentage of hæmoglobin, to count the leucocytes when they appear to be in unusual numbers, and to pay some attention to the appearance of the red globules. In the latter case we notice whether there is a tendency to microcytosis, which is apt to indicate an effort at blood regeneration, such as occurs after copious hemorrhages, or whether the globules are enlarged (macrocytosis), as in some severe forms of anæmia. The presence of poikilocytosis (irregular formation of red corpuscles) is also noted as giving evidence of decided degeneration, such as occurs in advance forms of anæmia.

Simple Anæmia.—This condition is one that very frequently complicates the march of surgical diseases. It is not commonly attended by an actual insufficiency in the volume of the blood, but by a diminution in the number of red blood cells and the amount of hæmoglobin. It commonly appears to be due to insufficient or improper nutrition and to unhealthy surroundings. When it exists to a very marked extent it must be considered as a distinct contraindication to any extensive surgical procedure, except in the presence of emergencies. Mikulicz insists upon the fact that operations must not be performed if the percentage of hæmoglobin is below thirty. In practice we are often able, by appropriate treatment, to improve the composition of the blood before an operation to such an extent as to render our procedures entirely safe. It is important to note the fact that many stout men, of the so-called plethoric

type, are in reality distinctly anæmic. Many of these are found among beer drinkers who, by excessive action of the kidneys and of the skin, combined with hard manual labor, unduly tax their hearts, while their digestion is impaired.

Symptomatic Anæmia.—In the former group we more or less arbitrarily include those cases in which the ordinary form of anæmia is, at least from the clinical standpoint, the primary pathological condition. In symptomatic anæmia, on the other hand, we see a condition which seems to be derived secondarily through the agency of some distinct antecedent disease. We find it complicating all manner of disturbances of the gastro-intestinal tract, of the circulatory and excretory apparatus, and following the exhausting fevers, or any of the diseases which distinctly affect nutrition. From the surgical standpoint it is of less importance than the simple form, since the causative conditions are usually easily recognized, and we must judge of the advisability of surgical interference according to the nature of the primary disease. The mere presence of anæmia, therefore, suggests the possibility of other trouble, and emphasizes the ever-present need of examining all our patients at least as searchingly as do life insurance examiners before undertaking an important operation.

Chlorosis.—As this is a disease that affects nearly though not quite exclusively girls at the period of puberty, surgeons do not very often see it as complicating gynæcological cases. Its existence in a certain number of instances of menstrual disturbances for which operative interference has frequently, but seldom very wisely, been advocated, gives it some interest from the practical surgical standpoint. Its fairly frequent association with hysterical manifestation should lead the surgeon to investigate in what manner, if any, the latter is a factor in producing or exaggerating the symptoms complained of. Chlorosis, like other forms of anæmia, is, when at all severe, a contraindication to the performance of surgical operations. In this disease the frequent lack of development of the cardio-vascular system must militate against the processes of repair, and the tendency to thrombosis sometimes shown in chlorosis might also cause us some hesitancy, as would also the liability to hæmorrhage presented by some chlorotic girls.

Malignant Anæmias.—Progressive pernicious anæmia and leucæmia are of no practical interest from the purely surgical standpoint, inasmuch as no surgical interference would ever be thought of in any case in which the presence of either of these diseases is a complicating element. Hodgkin's disease, however, merits some consideration on our part, if only for the reason that the diagnosis between it and some other processes characterized by glandular enlargements is still often a matter of some difficulty, to say the least. In the first place, many more or less atypical

forms arise, and the impression is somewhat prevalent that many varieties of glandular enlargement and multiplication have at various times been included in its description. In practice we are at times compelled to establish a differential diagnosis between pseudo-leucæmia and syphilitic, tuberculous, and ordinary inflammatory affections of the glands, besides the presence of the ordinary local malignant processes. If all these conditions can be eliminated, a problem not always easily solved, surgical interest still remains in the fact that in the presence of some form of Hodgkin's disease operative treatment at an early date may prove of some benefit. The following case may prove of interest in connection with this subject:

B. N., aged twenty-nine, was admitted to the French Hospital in November, 1894. He presented an enormous glandular enlargement involving the left side of his neck and extending from the mastoid process down to and beyond the clavicle. The axillary glands did not appear to be involved. The man denied syphilis, presented none of the cutaneous or other symptoms of this disease, and had been for some weeks taking antisymphilitic treatment without benefit. He had never presented any signs of malaria, was not rhachitic, and had never had any strumous enlargements as a child. There was moderate enlargement of the spleen. His general appearance was distinctly anæmic. No blood count was made, and under the microscope there seemed to be no distinct leucocytosis. The temperature, while the patient was under observation, varied at irregular intervals from normal to 100 degrees F.

The man insisted upon an operation, as he complained that his appearance prevented his getting any work. He was most willing to submit to what was told him would be a mere chance of permanent relief. The operation was done on November 18th, and was so extensive that the patient remained under ether for four hours and a half. The glands removed more than filled a pint measure. They were not soft, nor did any of them present any evidence of tuberculosis degeneration. Union took place by first intention, and the patient was discharged three weeks after the operation. He was then lost sight of, but returned in December, 1895, presenting a glandular enlargement about the middle of the posterior edge of the sterno-mastoid on the left side. Seven glands were removed the day after. This patient was seen in February of the present year, and has had no recurrence of the trouble.

This case was not studied from the standpoint of blood examination with the care that would have been taken at the present day, and the exact diagnosis must remain uncertain. Yet it shows that occasionally we meet with doubtful cases in which a thorough operation offers chances of recovery. Surgical treatment will, of course, remain limited to the cases in which the glandular enlargement is local and offers a good prospect of complete removal.

Leucocytosis as a Symptom of Pus Formation.—Pus formation is practically always attended by a distinct increase in the number of leucocytes to be found in the blood. If these are counted immediately before the first meal, in order to eliminate the digestive leucocytosis that invariably accompanies the process of digestion, we shall obtain a reliable method of diagnosis in cases in which the presence of pus is suspected but not certain. A recent article by H. Stuart Maclean, in the *Medical News*, constitutes a valuable contribution to this subject, as showing the distinct advantage of a routine use of blood count in doubtful cases of purulent collections. It is of the utmost utility in the diagnosis of deep-seated visceral abscess, of appendicitis attended with pus formation, of pyosalpinx as distinguished from other ovarian and tubal troubles, and of osteomyelitis. In cold or tuberculous abscess there is no increased leucocytosis, unless there is added an infection due to the ordinary pyogenic germs. Finally in the presence of shock we may diagnosticate hæmorrhage from concussion or compression by the increase of leucocytes and the diminution of red globules which occurs in the first.

Treatment.—As the surgeon's first concern is always to place his patient in such a condition that he will easily bear any intended interference and promptly recover from it, complicating blood disturbances always call for treatment at his hands. The matter is simple enough, for we practically rely upon iron, but the choice is more difficult, as we meet with much contradiction of opinion. The merits of organic and inorganic preparations are still under contest. Of late there has been some reaction in favor of the latter, but we hardly feel that it is well justified. There is no doubt that none of the inorganic preparations are directly absorbed into the blood, but, while it has lately been stated that there is no convincing proof that this occurs with the organic forms, the researches of Quinke and others show that this is more than probable in the case of some of the organic preparations. The value of inorganic preparations must be admitted, but the question is one of superiority. We know that it is not true that iron acts only by combining with the sulphureted hydrogen of intestinal putrefaction, thus allowing the feruginous nucleo-albumins to be absorbed, since the sulphide of iron may be given with good results, and since other substances which readily combine with sulphur do not produce good results. The theory that iron has but a local action in the intestines is disproved by the fact that the livers of animals that are given iron are richer in this substance than the livers of those to which no iron is administered. Stengel, in his fine essay on the diseases of the blood in the *Twentieth Century Practice of Medicine*, agrees with von Noorden in believing that iron acts as a direct stimulant to the hæmatopoietic organs. Clinical observation has certainly shown that the organic preparations are better tolerated and may

be taken for a longer time than the inorganic ones. No one contests the value of Blaud's pills, yet, in many cases, they have to be given in apparently excessive doses to obtain good results, and in such instances they usually constipate and cause gastric disturbances. The pills of the carbonate often cause gastralgia, and a certain proportion of patients can not take them. The liquid preparations, such as the tincture of the chloride and the syrup of the iodide, are of distinct value, yet they possess some disadvantages. If we admit that the inorganic preparations sometimes give fairly prompt and favorable results, we must also admit that their administration has to be limited to the cases which show no harmful results from their use. Besides this, we may be disappointed by old and unreliable preparations.

The value of chalybeate medication is something that may be tested accurately by blood count and estimation of hæmoglobin. Repeated investigations of this character have certainly shown the value of some of the organic preparations from this standpoint. In many instances they have shown a distinct superiority over the inorganic ones, and their greater palatability, with the fact that they hardly ever disagree with the stomach, and that in their best forms they do not cause constipation, and may usually be administered for any length of time, are distinct points in favor of their use.

For several years past the writer has made use of the liquor ferri peptomanganatis of Gude in all instances of anæmia complicating cases in his surgical practice, with exceedingly good results, some of which will be detailed further on. Examination of the blood was made in the majority of these cases.

Dr. von Ramdohr, of this city, read before the Academy of Medicine on May 27, 1897, a paper subsequently printed in the New York Medical Journal for June 26, 1897, in which he gave the results he obtained after gynæcological operation by the administration of the peptomangan. His observations being controlled by blood count and estimation of hæmoglobin, are of distinct scientific value. In eleven patients this remedy was administered during a period averaging a trifle over twenty-two days. The blood count in all these patients averaged 3,367,727 red blood corpuscles before the administration, and had risen to an average of 4,272,363 at the end of the period mentioned.

Dr. Emory Lanphear, in a similar investigation in three surgical cases, found a blood count averaging 3,286,666 before treatment, a number corresponding very closely with that found by Dr. von Ramdohr. He kept his patients under treatment for a period averaging a little over thirty-seven days, however, and then his blood count showed an average of 4,735,000.

In the following cases treated by the writer the blood examinations

were made either by himself or under his supervision by Dr. Brandeis, Dr. Overton, and Dr. Lynch, all of the House staff of the French Hospital:

Mrs. O. F., aged forty, sent for me December 22, 1898, to be treated for a Colles's fracture on the right side, which had taken place on the morning of the same day. Extreme anæmia being noticed, the patient stated that she had vomited blood occasionally for the last three months. Further inquiry and examination led to the diagnosis of ulcer of the stomach. Blood count 2,179,000; hæmoglobin, forty-two per cent. She was placed on peptomangan, in half ounce doses four times a day, which she bore exceedingly well. She had previously used the tincture of the chloride of iron and Bland's pills without good results. On January 31, 1899, her blood count showed 3,874,000 red globules and hæmoglobin fifty-eight per cent. Her symptoms had all greatly improved.

A. J., a French woman, aged twenty-nine, was admitted to the French Hospital on January 13, 1899, suffering from metrorrhagia due to retained products of conception. She had been bleeding at frequent intervals for three months past. She was curetted and given peptomangan. Blood count before treatment, 3,100,000; hæmoglobin, thirty-nine per cent. After the lapse of three weeks she showed 4,435,000 red corpuscles and hæmoglobin sixty-two per cent.

A similar experience was obtained, during the course of last year, in a large number of cases in which curetting was done for various reasons.

Mrs. McG., Irish, aged fifty-seven, was admitted to the French Hospital on May 22d suffering from uterine cancer, with some involvement of the vaginal wall posteriorly. This case was a rather bad one for operation, and hopeless as to entire cure. As operation offered some chance of prolongation of life, by stopping the bleeding and checking for some time the growth of the neoplasm, I did a vaginal hysterectomy on May 26th, and removed a considerable portion of the posterior vaginal wall. She was given peptomangan. Blood count before treatment, 1,924,000; hæmoglobin, thirty-three per cent. After the lapse of three weeks the blood count was 3,894,000 and the hæmoglobin forty-nine per cent. I saw her last November, and she then presented signs of a recurrence. She had, however, enjoyed in the meanwhile some months of very fair health.

A. F., a French woman, aged forty-four, was admitted to the hospital on June 3, 1899, for a very tight stricture of the rectum, of syphilitic origin, and dating ten years back. In the last few years the stricture had on several occasions been stretched and forcibly dilated. She had used rectal bougies herself for a long time. The only prospect of relief seemed to lie in a left inguinal colotomy, which was done some time after her admission. She was exceedingly anæmic, and antisiphilitic treatment did not appear to lessen the anæmia. Peptomangan, administered during

four weeks, increased the red blood cells from 2,945,000 to 3,600,000, while the hæmoglobin rose from forty-one to fifty-five per cent. This improvement, however, was rather temporary, and was not maintained very long.

J. U., a French sailor, aged twenty-nine, was sent to the hospital from his ship on June 4th suffering from a mastoid abscess. His condition was so bad that he was operated on within a few minutes after his arrival. He stood the operation well. As he suffered from profound sepsis, and his blood count was 4,320,000, he was given peptomangan. In two weeks his blood count had reached 5,520,000. The hæmoglobin, through an oversight, was not estimated.

J. R., a French woman, aged twenty-nine, was admitted on June 9th suffering from a large pelvic abscess. The temperature was 104 degrees F. on admission. The abscess was evacuated by anterior vaginal section. Blood count, 2,640,000; hæmoglobin, thirty-five per cent. Peptomangan was given for three weeks, after which the blood count was 3,740,000 and the hæmoglobin sixty-eight per cent.

Mrs. A. P., a French woman, aged forty-two, was seen at her house on April 20, 1899. I was called in consultation by Dr. Monory, visiting physician at the French Hospital, who had himself been summoned by a midwife who had been in charge of the case. The woman was in labor, and shortly after the pains began she had a severe hæmorrhage. The injudicious use of ergot by the midwife had only served to render the bleeding more violent. Dr. Monory and myself administered chloroform immediately and, tearing through a placenta prævia centralis, did a podalic version and rapidly delivered a dead child. The uterus was packed with aseptic gauze. The woman appeared to be practically exsanguinated, for the hæmorrhage was the most severe I have ever witnessed. As the midwife manifested her desire, and protested her ability to take charge of the after treatment, we left the patient, after giving full directions for the removal of the gauze on the next day, and enjoining great cleanliness. This patient was admitted to the French Hospital on May 3d, not having been seen by a physician in the interval. Upon admission, during the afternoon, she had violent chills, and her temperature was 106 degrees F., rising to 107.2 degree F. an hour later. The gauze had been removed only after the lapse of a number of days. The patient was of a waxy pallor and the pulse nearly imperceptible. A profuse foetid discharge issued from the vagina. Intra-uterine lavage was done at once with saline solution, many gallons of which were used. An intravenous injection was also practised. The blood count was 1,760,000; hæmoglobin, twenty-eight per cent.; leucocytes, 32,000. Strychnine and nitroglycerin had to be frequently administered. During the course of the next three days the patient seemed to manage to just keep alive, and we were momentarily expecting her death. On May the 6th she was

given antistreptococcus serum hypodermically, and this was repeated twice on subsequent days. The temperature then gradually fell on the 8th to 100 degrees F., the lowest degree yet reached, and in the course of the next four days came down to normal. From the first she had been fed with milk and whiskey in frequent small doses, with drachm doses of peptomangan three times a day. This was soon increased to half-ounce doses. Four weeks after admission her blood count was 3,840,000; hæmoglobin, sixty per cent. She was discharged at this time in good general health.

A. K., a Greek, was admitted on the same day as the previous patient, suffering from a severe infected stab wound on the external aspect of the left thigh. His temperature was 106 degrees F. on admission, and rose higher during the night. The original wound affected the lower end of the vastus externus a few inches above the knee joint. The knee itself was swollen, and the whole external aspect of the thigh was fluctuating. The original wound was enlarged and a counter opening was made three inches below the trochanter. A large rubber drainage tube was introduced, the ends protruding through the two wounds. There was an enormous discharge of stinking sanious pus, and the wound and the drainage tube had to be washed out several times a day. Notwithstanding these procedures, extremely high temperatures persisted, and he was given antistreptococcus serum. His temperature then gradually began to abate, and he was able to leave the hospital six weeks after admission. His blood count was 2,954,000 and hæmoglobin thirty-two per cent. the day after he was admitted. He was given peptomangan during the whole of his stay, and, upon leaving, his blood count had risen to 4,210,000 and hæmoglobin sixty-two per cent.

These last two cases represent forms of the most violent sepsis, and are the most pronounced among quite a large number which the writer has had an opportunity to treat during the last year. In all such cases the administration of iron in a form which does not unfavorably affect the stomach is certainly of the greatest value, and appears to decidedly shorten the course of the septic condition.

In the surgical diseases of childhood the use of peptomangan has proved exceedingly beneficial in my hands.

B. F., a boy, aged eleven, bearing marks of old sores due to tuberculous cervical adenitis and presenting a very anæmic and ill-nourished appearance, was brought to me on February 29, 1899, for a suppurating sinus upon the outer aspect of the right arm. A sequestrotomy was done, and a large sequestrum was removed from the humerus; the wound was curetted and healed nicely under gauze packing. The boy had taken cod liver oil and Fowler's solution for a long time, but was not much benefited. When I first saw him he had 3,100,000 red corpuscles and hæmo-

globin thirty-three per cent. He was given peptomangan in two-drachm doses, and in three weeks had 4,254,000 red blood globules and hæmoglobin sixty-eight per cent.

In two cases of facial erysipelas in girls, seen at St. Vincent de Paul Asylum, and in a number of instances of cervical adenitis, the blood count and estimation of hæmoglobin were rapidly improved under the use of peptomangan. In rhachitic children it has given me much satisfaction. During the course of treatment of a boy upon whom I did a double osteotomy for bow legs, the blood count increased from 2,844,000 to 3,842,000 in four weeks, during which this preparation was given before the operation. The following case is of some interest:

B. L., aged eight, an inmate of the asylum, was taken on January 26, 1900, with what appeared to be a severe attack of acute rheumatism, the right shoulder and the head of the left tibia being red and swollen. Salicylates showed no improvement on the next day, and acute osteomyelitis was diagnosed. The child's mother could not then be found, in order to consent to an operation, and on the 28th, as the tissues over the left upper half of the tibia were red and exquisitely painful, with slight fluctuation, one small incision was made down to the bone, giving issue to some sanious pus, with much bleeding. I did not feel justified in proceeding further without the mother's consent. Pressure stopped the bleeding, which, however, recurred furiously during the night. No vessel could be found to be at fault, and strong pressure, with an elevated position of the limb, had to be relied on. It was only then remembered that the child had, two years previously, nearly bleed to death after the extraction of a tooth. It was evident that the child had hæmophilia. The state of affairs, with repeated refusals on the part of the mother, prevented any further operative interference to reach the medullary canal. The child was placed on the use of peptomangan, which, notwithstanding the septic process still going on, raised the estimation of hæmoglobin from thirty-two per cent. the day after the hemorrhage to forty-five per cent. the next week. The wound has since continued to suppurate, showing continuous slight rises of temperature, and the medullary cavity has opened spontaneously and is draining through the wound. The child seems to do much better than might have been expected during the course of such a prolonged sepsis, and continues the use of peptomangan.

The writer has altogether made, or caused to be made for him, blood counts and estimations of hæmoglobin in fifty surgical cases in which peptomangan was used. In his experience of the last few years he can recall only one patient, a nervous and capricious young woman, with whom it failed to agree. A statistical examination of the results obtained showed that on an average the first three weeks of treatment give an in-

crease of about 40,000 red blood globules a day, this proportion diminished later on as the blood becomes restored to its natural composition. The cases cited by von Ramdohr and Emory Lanphear, as well as those I have observed, show that we have in such preparations as peptomangan a means of obtaining good results with a certainty that is almost mathematical, and without any of the distressing symptoms so frequently following the use of the inorganic preparations.

23 West Thirty-Seventh Street.

TREATMENT OF COLLEY'S FRACTURE.

This boy is ten years of age; he fell on his arm three days ago and sustained an injury to his wrist. This was reduced, and later when the splint was removed for a skiagraph the deformity occurred. It is a fracture of the lower end of the radius, a typical Colley's fracture. We have it here on a curved palmar splint, a very good one. We must anaesthetize him in order to make a proper reduction. This case is very instructive. These fractures usually fall into the hands of the physician instead of the surgeon. It is scarcely fair to the general practitioner to be compelled to undertake the treatment of fractures unless he is seeing them constantly.

The kind of splint to put on is the kind you can use with best results. My own preference is for the Bond splint, with the block not quite so high as it used to be and the angle of deflection not so great. The leather splint is largely used, I know, but I could never get such good results as with other fixtures. Others that are used to it can get the good results, and, as I say, the splint to use is the one you can use the best.

The method of reduction ordinarily used is to hold the patient's hand in one hand and press down with the other; or by putting it across the knee, pressing and pushing the bones into place with the thumbs. The method I prefer is to take the patient's hand at the sides in both of yours, with the thumb placed parallel on the broken fragment, then, taking a firm grip, make powerful pressure downward with the thumbs, while pulling toward you. Reduction is almost always perfect and complete. If it doesn't go in at the first attempt without etherization, etherize and try again, for it is too painful to repeat.

We use the old-fashioned dressing. Put a pad under the upper fragment and over the lower fragment. Raise the elbow to a right angle to get the widest interosseal separation. Put on the bandage not too tight. Dress at least every other day and put the parts through their range of motion.—Medical Times.



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OBSTETRICS—Edward A. Ayers, M. D.

*“They don’t chase after it
into spleen or cerebrum,”*

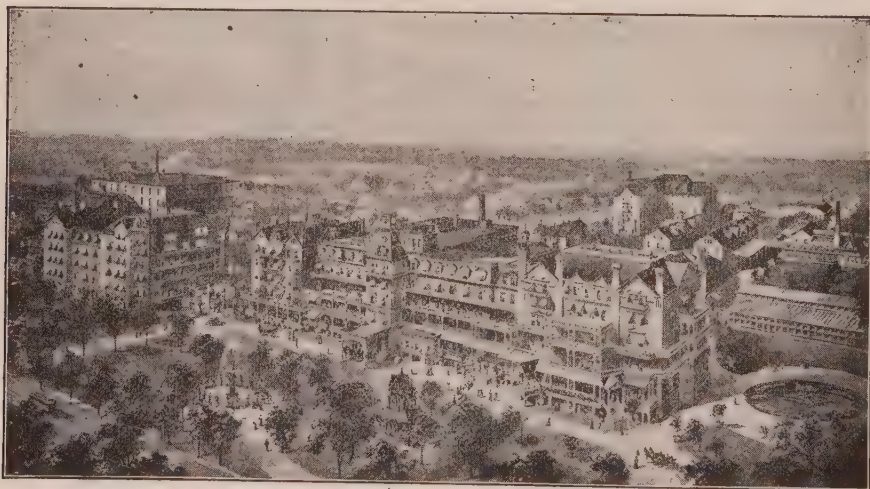
*says a writer, referring to the effect of intestinal antiseptics upon the Typhoid bacillus,
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Trouble in Texas.

At the last meeting of the State Association in Texas much time was occupied in discussing the needs of additional legislation in that State; and from the discussions it is evident that things are not what the leading men in the profession would like to have; neither are the chances good to secure such legislation as is needed.

At present any man who secures a medical diploma can practice medicine in the great State of Texas, and, from what was said in discussing this question, it appears that there is very little trouble in securing what purports to be a medical diploma in that State. Two or more so-called colleges are issuing diplomas without regard to the qualifications of the applicant. The only thing required is that they shall have the necessary amount of money.

For several years the State Association has had committees on legislation who have gone before the General Assembly and asked for the enactment of a law to better regulate the practice of medicine—a law to re-

quire all persons to secure a license from a board of examiners before they can practice medicine. But the efforts which have been made along this line have been unsuccessful. The politicians have turned a deaf ear to all appeals to raise the medical standard. It is charged that the present governor, when a candidate, pledged himself to favor the legislation asked by the State Association, but that he has utterly failed to keep his promise, and that no help can now be expected from him. He has joined the list of politicians who want to be on what they believe to be the popular side, irrespective of what is right.

It is also charged that the secular press of Texas is not in sympathy with the efforts of the Association, and that it cannot get its views before the people through the press without paying for what space is used for that purpose.

So, with the governor, the politicians and the press against the Association, it seems that it will have a hard fight to secure the enactment of laws necessary to elevate the standard of the profession. But those who are interested should press their fight before the people. A campaign of education should be inaugurated in every county in the State, and when the people are made to understand the necessity for such laws as the State Association asks, then they will demand their enactment. No doubt the politicians have succeeded in making the people believe that the proposed bills to better regulate the practice of medicine are in the interest of the doctors and against the people, and it is now necessary to show the people that the proposed bills are to their interest and are intended for their protection.

The people, as a rule, can be depended upon to do what is right, and when they are wrong, it is usually because they do not properly understand the issue before them.

The Jefferson County Medical Society Passes on an Ethical Question.

The following report was submitted to the Jefferson County Medical Society by the Board of Censors, to whom the Society had referred an ethical question touching contract practice:

Birmingham, Ala., September, 1900.

To the Jefferson County Medical Society:

At your meeting of August 27, 1900, the following query or resolution was referred to your Board of Censors for an answer, and was officially communicated to them by your Secretary:

Resolved, That it is not ethical for a member of this Society to do practice by contract for an organized body of employes in a mercantile establishment that cannot be classed as a manufacturing one, or for any

organization except such as are specified in the Ordinances of the State Medical Association.

A brief study of the fundamental principles involved in this resolution is necessary for a clear and satisfactory explanation.

1. Every doctor who applies for membership in this Society promises in that application to abide by the rules and regulations of the Society.

A brief analysis of the basic conditions and requisites will lead us to a definite and correct conclusion as we trace them step by step.

2. Section 2 Article 3, page 6, Book of Rules, "Objects—one specific item, "To promote professional brotherhood and encourage a high standard of professional ethics."

3. Section 3, Article 5, page 6, Book of Rules, "Members"—"All members of County Societies which hold charters from the Association shall be members of this Association."

4. Section 14, Article 64, page 13, Book of Rules, "County Societies"—"The County Medical Societies shall have immediate jurisdiction over the medical profession, and over all the interests of the medical profession in their respective counties; but shall be under the general control and direction of the State Association."

5. Article 61, page 13, Book of Rules, "They shall adopt the Code of Ethics of the American Medical Association."

6. Section 14, Article 77, page 15, Book of Rules—"The County Societies shall all consider themselves bound to abide by the decision of the majority of the members at any annual session of the State Association, whether the votes of their own delegates be recorded in that majority or not."

7. Page 45, Book of Rules, "Code of Ordinances," Paragraph 1—"That it is the sense of this Association that all of its counsellors and members are in honor bound to give their faithful and earnest support to all of its declared plans and policies."

8. Paragraph 4, page 45, Book of Rules—"That all counsellors and members should be willing to settle all differences growing out of their relations to the Association within the Association itself and to acquiesce in the constitutionally expressed will of the majority."

9. Section 3, Article 4, page 58, Book of Rules—"This Society adopts for the ethical guidance of its members the Code of Ethics of the American Medical Association, together with such additional ethical rules as may be from time to time promulgated by said American Medical Association and by the Medical Association of the State of Alabama.

10. Page 68, Book of Rules, Section 2, Paragraph 1—"Be it ordained: That every county medical society which holds a charter from this Association will be expected and required to fulfill its constitutional obligations to this Association."

11. It follows necessarily as the result of this study, that the recent ordinance in reference to contracts adopted by the Medical Association of the State of Alabama, April, 1900, becomes a binding rule upon every member of this Society, and clearly lays down every condition under which any contract is ethical, excluding all others.

12. These conditions are thus set forth in that ordinance: "He may practice for a stated salary for the unofficial employes of any railroad corporation, so far as accidents and injuries received in the service of such corporation are concerned, without including in such contract the salaried officials of such corporations; for the laborers of mining companies and manufacturing establishments and their families; for pupils attending educational institutions removed from their homes, without including in such contract the presidents, professors or teachers of such institutions, or their families; for the inmates of poor houses, charity hospitals, jails and prisons, without including in such contract the salaried officials and managers thereof, or their families; for the hired laborers and tenants on plantations and for their families, without including in such contract the owners and managers of such plantations or their families; for the sailors or crews of ships or boats, without including in such contract the captain, master, clerks or other officers thereof, or their families. It shall be unethical to make a contract to do practice on terms other than those herein prescribed.

From all these considerations our answer to the resolution referred to us is, that a contract of this kind set forth in the resolution is not ethical.

E. H. Sholl, M.D.,
E. P. Riggs, M.D.,
C. Wilson, M.D.,
L. G. Woodson, M.D.

Meeting of the Tri-State Medical Society.

The twelfth annual meeting of the Tri-State Medical Society will meet at Chattanooga, Thursday, Friday and Saturday, October 11, 12 and 13, 1900, just after the meeting of the Mississippi Valley Medical Association, Asheville, N. C. A rate of one fare for the round trip will be in force on the occasion of the reunion of the Army of the Cumberland and the Spanish-American War Veterans.

Following is a partial list of papers:

1. The Therapeutic Effect of Iodine Demonstrated by Physiological Action and Pathological Demonstration—L. H. Warner, Brooklyn, N. Y.
2. Simple Inflammation of the Eye—E. H. Jones, Murfreesboro, Tenn.
3. Demonstration of Rectal Valves with Observation on their Pathology—A. B. Cooke, Nashville, Tenn.

4. Continued Malarial Fever—O. E. Williamson—Alabama.
 5. Rheumatoid and Osteo-Arthritic Conditions of the Feet, Knees and Spine—Michael Hoke, Atlanta, Ga.
 6. Xeroderma Pigmentosa—J. R. Gillipsie, Dayton, Tenn.
 7. An Epidemic of La Grippe—R. H. Tatum, Chickamauga, Ga.
 8. The Use of Serums and Animal Extracts as Medical Agents—P. R. Cortelyou, Marietta, Ga.
 9. Tolerance, Suggestion and Other Odd Features in Eye Strain—Ross P. Cox, Rome, Ga.
 10. The Use and Abuse of Nasal Sprays—Dunbar Roy, Atlanta, Ga.
 11. Twenty-two Operations for Mastoiditis—J. M. Crawford, Atlanta, Ga.
 12. The Value of Blood Examinations in General Medicine—Claude A. Smith, Atlanta, Ga.
- Papers promised from the following, titles not given:
13. J. B. Murfree, Murfreesboro, Tenn.
 14. C. G. Savage, Nashville, Tenn.
 15. R. E. Fort, Nashville, Tenn.
 16. R. F. Glenn, Nashville, Tenn.
 17. Bernard Wolff, Atlanta, Ga.
 18. J. G. Earnest, Atlanta, Ga.
 19. J. B. S. Holmes, Atlanta, Ga.
 20. G. H. Noble, Atlanta, Ga.—A Device for the Relief of Bladder Spasm in the Treatment of Cystitis.
 21. Wm. P. Nicolson, Atlanta, Ga.
 22. Willis F. Westmoreland, Atlanta, Ga.
 23. W. S. Elkin, M. D., Atlanta, Ga.
 24. President's Address—Relation of the Profession to the General Public—R. R. Kime, Atlanta, Ga.
 25. Some Anatomic and Histologic points in the Colon and Rectum of Interest to the Surgeon—J. Rawson Pennington, Chicago, Ill.
 26. Supra-Pubic Cystotomy for Traumatism with Median Perineal Drainage—J. G. Carpenter, Stanford, Ky.
 27. Delirium: Its Differential Diagnosis and Significance—Frank Parsons Norbury, Jacksonville, Ill.
 28. Relation of the Mastoid Process to the Cranial Cavity—Geo. D. Keiper, Lafayette, Md.
 29. Little Things in the Treatment of Trachoma—L. W. Beardsley, St. Louis, Mo.
 30. Title later—S. G. C. Pinkney, Atlanta, Ga.

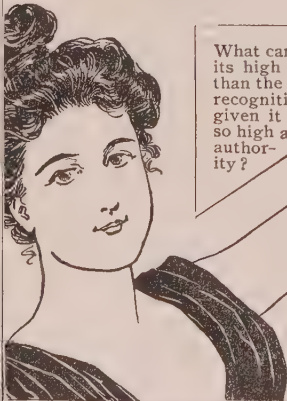
TONSILLITIS AND ENDOCARDITIS.

Packard (Am. Jour. of Med. Sciences, January, 1900) reports five cases of endocarditis occurring in the course of tonsillitis. Four of the cases occurred in children under fifteen and the other case was a man aged 32 years. It was believed that the cases were "plain acute tonsillitis and having no connection with rheumatism and that the endocarditis arose as a direct consequence either by infection of the endocardium or by micro-organism which gained entrance through the tonsil, or by structural change induced in the mitral leaflets by a coagulation necrosis of other chemico-vital action of toxins produced by micro-organisms in the throat." The discussion of why he rejects rheumatism as the causative factor is not entered into. Tonsillitis as the cause of endocarditis is occasionally mentioned in literature, and when so mentioned it is nearly always referred to as rheumatic in origin, but it must be acknowledged that the pyemic origin of many joint complications as well as the complicating cardiac disturbances cannot be denied. —Cleveland Bulletin.

From THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

"AT the Forty-fourth Annual Meeting of the American Medical Association, Llewellyn Eliot, A.M., M.D., Surgeon to Providence Hospital and Eastern Dispensary, and President of the Medical Association of the District of Columbia, etc., Washington, D. C., in an article read before the Section on Obstetrics, said:

"In irrigating these cases, we may use the solution of bichloride of mercury, carbolic acid, or any other medication which individual preference may suggest; for my part, I employ a solution of Tyree's Antiseptic Powder, which consists of: parts sod. bor. 50, alumen 50, ac. carbol 5, glycerin 5, the cryst. prin. of thyme 5, eucalyptus 5, gaultheria 5 and mentha 5."



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J. S. TYREE, Chemist, Washington, D. C.

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Miscellaneous Notes.

Dr. Johnston, one of Tuskegee's good doctors, spent several days in the city during the month.

Dr. J. D. Heacock, of Woodlawn, has been re-elected county physician for Jefferson County, Ala.

Dr. Hudson, of Lafayette, Ala., was in the city last week. While here he attended a meeting of the Jefferson County Medical Society.

The editor would like to have reports from the County Medical Societies in Alabama for publication in the Alabama Medical Journal.

Dr. Howell, of this county, joined the press convention excursion, and had a delightful trip out west. He was specially pleased with Denver.

Dr. Mason was elected Secretary of the Jefferson County Medical Society at its last meeting, to fill the unexpired term of Dr. Jordan, resigned.

Dr. T. A. Henley has been on the sick list for a few weeks, but his many friends in and out of the profession will be glad to know that he is convalescing.

The Birmingham Medical College will open its next session about the first of October. The Dean informs us that the prospects are good for a large attendance.

Dr. Woodson, Professor of Diseases of the Eye, Ear and Throat in the Birmingham Medical College, has returned from North Carolina, where he went for a few days' rest.

The editor was shown through the St. Vincent Hospital a few days ago by Father O'Reilly. This is one of the largest and best furnished and most complete hospitals in this county.

Dr. J. W. Heacock, of Alpine, Ala., was in to see us during the month. The Doctor was recently elected by the people of his county (Talladega) to represent them in the next session of the Legislature of Alabama.

The doctors who read papers before the County Medical Societies in Alabama are requested to send their papers to the Alabama Medical Journal for publication. Don't wait for the editor to write a personal letter soliciting these papers, but send them in. If for any cause we cannot publish your paper, it will be returned to the writer, with explanation.

The Phosphates of Iron, Soda, Lime and Potash, dissolved in an excess of Phosphoric Acid, is a valuable combination to prescribe in Nervous Exhaustion, General Debility, etc. Robinson's Phosphoric Elixir is an elegant solution of these chemicals. (See page 6.)

Treatment of Cancerous Cachexia. Lawrence (The Medical Brief, April, 1900), gives as the best treatment for cancer and the cachexia attending it, teaspoonful doses of Ecthol four times daily in conjunction with alterative doses of iodide of arsenic. The latter should be administered in doses ranging from one-sixtieth to one-thirtieth of a grain three times a day and continued for a long period. Ecthol contains the active principle of thuja which is accorded specific value in cancer. The treatment outlined is aimed to cause absorption of the cancerous tissues.—Medical News.

"Vin Mariani" is essentially the brain and nerve tonic of those who have talent and genius. These it is who compose the great army of intellectual workers, and the ravages made upon their nervous systems by the demands made upon them are at times truly appalling. This damage and consequent drain yield to nothing more quickly than to "Vin Mariani." The most noted European physicians, literateurs, musicians, singers, artists and diplomats have sent the most flattering letters to M. Mariani extolling his product. Not only these but crowned heads as well have been mentally invigorated and rejuvenated by "Vin Mariani" and never tire of speaking words in its praise. It must be acknowledged that unsolicited testimonials, couched in such glowing terms, from such sources, are the best evidence possible that can be offered for the merits of the preparation. When "Vin Mariani" becomes as well known in this country as it is in Europe, it will be adopted as one of the indispensable remedies in the household.—The St. Louis Medical and Surgical Journal, May, 1899.

Dr. Osler, of Johns Hopkins University, in a recent paper stated: "Arrest or cure of tuberculosis is a question entirely of nutrition, and the essential factor is so to improve the resisting forces of the body that the bacilli cannot make further progress, but are so hemmed in that they are either prevented effectually from breaking through the intrench-

ments, or in rare cases, they are forced to capitulate and are put to the sword."

Clinical experience has demonstrated beyond a doubt that Angier's Petroleum Emulsion with Hypophosphites fully meets the foregoing conditions. Its efficacy in relieving the distressing cough of phthisis, has been recognized from the first, but it is only within recent years that the medical profession have begun to fully appreciate the importance of its action in the digestive area and its powerful influence upon the nutritive processes. Stimulating the appetite, anti-fermentative, soothing, healing, it not only checks noxious chemical fermentation, and the absorption of such noxious fermented residuum of digestion in the blood, but it soothes and cleanses the entire mucous surface, producing a more healthy tone and power of assimilation, and leaving the digestive organs in a condition to better perform their natural functions. With the improvement of the process of digestion, assimilation and nutrition, the condition of the diseased lungs must of necessity improve.

Jno. C. Levis, M. D., West Bridgewater, Pa., says: I have used Celerina in my own case for insomnia. Among all the hypnotic preparations and nerve tonics, it stands justly pre-eminent. Several persons are now using it and report that no preparation has given such permanent and prompt relief. In a general practice of more than a half a century, this is perhaps the first public testimony I have offered. Celerina is the very best nerve tonic now offered to the profession, and can not be too highly recommended. To those wanting a nerve stimulant it will be just the remedy.

AN ADDITIONAL HONOR.

We have just been advised of the award by the Judges of the Paris Exposition, to Messrs. Wm. R. Warner & Co., of Philadelphia, New York and Chicago, of the highest medal prize, for their justly celebrated pharmaceutical products. This makes the 17th World's Fair highest prize, which has been awarded this well known and justly celebrated firm, and we join in congratulations to Messrs. Wm. R. Warner & Co. over their well merited and unbroken line of victories in competition with the World's manufacturers.

FOOD THEORY OF MEDICINE.

Walter Emery Merrill, M. D., U. S. Marine Hospital Service, says: "Among the advanced members of our profession, I believe the drug tissue-feeding theory no longer obtains. And rightly so, for it has not been proved that medicine is ever, in itself, a food. The large number of malarial cases emanating from the tropics are cured in the Marine Hos-

pital service, not by tissue-feeding, but by ridding the system of the intruder and directing the vital forces along the lines of repair. This I find to be best done by the frequent and judicious administration of laxative antikamnia and quinine tablets."

About September 25th W. B. Saunders & Co. will have ready "The American Illustrated Medical Dictionary," by W. A. N. Dorland, editor of "The American Pocket Medical Dictionary." This is an entirely new and unique work for students and practitioners. It contains more than twice the matter in the ordinary students' dictionary, and yet, by the use of clear, condensed type and thin paper of the finest quality, it forms an extremely handy volume only one and one-half inches thick. It is a beautiful specimen of the book-maker's art. It is bound in flexible leather, and is just the kind of a book that a man will want to keep on his desk for constant reference. It is absolutely up-to-date, containing hundreds of important new terms not to be found in any other dictionary. It is also extremely rich in the matter of tables, containing over one hundred original ones, including new tables of Stains and Staining methods, Tests, etc., etc. An important feature of the book is its handsome illustrations and colored plates drawn especially for the work, including new colored plates of Arteries, Muscles, Nerves, Veins, Bacteria, Blood, etc., etc.—twenty-four in all. This new work has been aptly termed by a competent critic, "The New Standard."

As soon as this book is issued, a copy will be sent you for review; but as it will be some time before the volume is ready, we should be pleased to have you make a preliminary announcement of it at the present time. The price of the work will be \$4.50 net, indexed \$5.00 net.

We shall also have ready in a few days the following new books:

"Modern Medicine," by Drs. J. L. Salinger and F. J. Kalteyer, of Jefferson Medical College, Philadelphia. Price, \$4.00 net.

"Rhinclogy, Laryngology and Otology, and their Significance in General Medicine, by Dr. E. P. Freidrich, of the University of Leipsig; and Dr. H. Holbrook Curtis, of New York. Price, \$2.50 net.

"A Text-Book of Histology," by Drs. Bohm and Davidoff, of Munich, and Dr. G. Carl Huber, of Ann Arbor, Michigan. Ready in October.

"Essentials of Histology," by Dr. Louis Leroy, of Vanderbilt University. Price, \$1.00 net.

"Surgical Technic for Nurses," by Emily A. M. Stoney, author of "Stoney's Nursing."

Also the following new editions: "Anders' Practice of Medicine," 4th edition, price, \$5.50 net; "McFarland's Bacteriology," 3d edition, revised and enlarged, price, \$3.25 net; "Hyde & Montgomery's Venereal Diseases," new enlarged edition, price, \$4.00 net; "American Text-Book of

Physiology," 2d edition, revised, in two volumes, Vol. I. now ready, price, \$3.00 net per volume; "Saunders' Pocket Formulary," 6th edition, increased in size by over 200 formulæ, price, \$2.00 net; "Garrigues' Diseases of Women," 3d edition, price, \$4.50 net; "DaCosta's Surgery," 3d edition, greatly enlarged, price, \$5.00 net; "Stengel's Pathology," 3d edition, revised, price, \$5.00 net.

During the next six months they will issue from four to six volumes in Saunders' Medical Hand-Atlas Series.

MALDEVELOPMENT OF THE ANUS.

Dr. Ada White (Indian Medical Record, July 4th) records the following unusual case. A Mahommedan child, aged two years, was brought by its father with the following history:

The child has suffered from constipation from its birth. The stools were small and worm-like, passed with great difficulty, much straining and pain. The bowels were moved about every eight or ten days, very seldom without a purgative. The child appeared healthy and well-nourished, exhibiting no signs of ill-health. On separating the buttocks and stretching the skin of the perinæum, a small slit, about a quarter of an inch long, was seen in the middle line close to the root of the scrotum. Behind, at the situation of the anus, there was no opening, but a circular depressed area indicated its position. The skin of this area was thin, and in the centre there was a dimple. The father stated that when the bowels were moved the fæcal matter was forced out with great difficulty through the slit. The efforts made in evacuating completely exhausted the child. On examining the opening, it was found to be a narrow oblique slit, shallow in front, deeper behind. From the posterior border a narrow canal passed beneath the skin backwards to the rectum; through this canal the fæcal matter was forced. The small size explained the character of the motions and the difficulty in defecating.

A probe pointed bistoury was passed from the slit through the sinus into the rectum, and the tissues were divided backwards in the middle line; the track of the sinus being laid open, the incision was carried through the skin closing the anal orifice. This was followed by a copious discharge of fæces. The wound was enlarged sufficiently to allow the finger to pass easily into the bowel. The wound healed quickly, the result of the operation being quite successful.

The author comments as follows:

"Malformation of the kind met with in this case is rare. No such case is described. The malformation present in this case appears to have been due to failure in the development of the anal orifice and to partial persistence of the dorsal portion of the cloaca. In the early period of fœtal development the intestine ends in a cloaca common to it and the allantois,

Subsequently the cloaca is divided into a dorsal and a ventral portion by the formation of a septum. As early as the fifth week there occurs an invagination of the epiblast behind the cloaca, and by the absorption of the invaginated tissue, communication is formed with the bowel; this is the anal opening. As this opening is being developed, the dorsal portion of the cloaca is closed by tissue which forms the perineum. In the case described above there was complete failure of anal development, and the closure of the cloaca was imperfect."—New York Medical Journal.

THE SACRED IMPORTANCE OF THE PREGNANT WOMAN.

The Interstate Medical Journal for July says editorially that each pregnant woman should become the honest concern of the most sincere consideration of every nation, State or individual man. If mental impression upon the bearing woman blesses or curses progeny, is not this a factor to which even the grandest statesman that earth ever saw should eagerly and willingly give his highest and best consideration? At the risk of being considered a dreamer, the writer maintains that any woman who becomes pregnant should at once become the deep con-

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IT WAS NO LEAP IN THE DARK, for the Kingsbury has been used in a number of Colleges near home for several years, and Dr. Massey knew its reputation. Among these are "The Cox Female College," College Park, Ga.; "Southern Female College," LaGrange, Ga.; "Tuscaloosa Female College," Tuscaloosa, Ala.; "Anniston Female College," Anniston, Ala.; "Southeastern Agricultural College," Abbeville, Ala.; "Agricultural College," Wetumpka, Ala.; "Gordon Institute," Barnesville, Ga.

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cern of State and community and individual. Laws should be devised so that surroundings may be arranged in their most beneficent manner to influence a coming mentality. If possible, no woman should be permitted to bear children amidst surroundings of squalor, vice and want. There is every reason for this, since from such course must come a bettering of elements in forthcoming progeny. Let it be a dream, still it is a dream which ennobles and refines the soul and fills it with the highest hope of humanity, mercy and progress. Instead of endowing universities, educational institutions, etc., with millions on millions, give some of these millions so as to take from want, squalor and crime their influence on the forming soul; for from age upon age it has been indicated that vice obtains its deepest perpetuity because the pregnant woman becomes a slave to her environment, and in her most impressionable period stamps upon her coming progeny the reflex of vicious surroundings. Men eternally must have the full force of cursed viciousness perpetuated just so long as cursed viciousness in surroundings is not corrected. It would pay the State, it would pay each individual soul in far nobler, grander and more humane benefits to make the pregnant woman the kind object of consideration by surrounding her with all that suggests purity, kindness and humanity.

We know that woman as at present situated will continue to bear children subject to the influence of her surroundings. Ages have demonstrated this, and it is as fixed as life itself. The foundation of every State must consist in the education of its youth. With the formation of the child in utero the State's concern should begin, since this is the most impressionable period in life. If the fate of a nation ultimately depends upon the strength and health of its population, then certainly the nation's care should start at the very commencement of existence.—N. Y. Medical Journal.

TREATMENT OF HAY FEVER.

In a highly interesting article on this subject Dr. A. E. Abrams, of Hartford, Conn., (*Annals of Otology, Rhinology, and Laryngology*, May 1900) states that hay fever occurs exclusively in individuals of acquired or inherited neurotic temperament, and for this reason the disorders can not always be cured by the same remedy or line of treatment, any more than a prescribed course of diet and remedies would be applicable to all cases of neurasthenia. In the treatment he lays much stress upon obtaining the co-operation of the patient for a period of time which in many cases must be extended over years rather than weeks or months. As the time for the anticipated attacks approach the patients must be warned against all over-excitement or depressing influence. As a tonic the author has found *nux vomica* or *strychnia* more useful than any other medicine. Opium he regards as dangerous, while the bromides have a

limited range of usefulness. In especially nervous cases the common pill of camphor, hyoscyamus and valerian proved quite useful. In his opinion, heroin promises to be an important addition to our means of allaying the accompanying cough or asthma, and is an excellent aid in the treatment of gastrointestinal irritation that some of these cases suffer from. The initial dose should be small, not over one-thirtieth of a grain, every two to four hours at first. While it should not be used unguardedly, it is much less likely to produce habituation than opium or morphine. The extract of suprarenal gland is highly recommended for the temporary relief of the nasal obstruction. All necessary operative work on the nose should be done before or after the hay fever season. In connection with Dr. Abrams' paper it is of interest to note that Dr. Wetherby has also employed heroin with excellent results in the treatment of hay fever, producing both prompt and permanent relief of the distressing irritation of the air passages. In cases of hay fever attended with gastric disturbance it is advisable, on the ground of recent observations, to employ the soluble heroin hydrochloride, owing to the fact that heroin acts best in an acid medium, and for the same reason the drug should be administered in these cases after the ingestion of food.

Prevent Accidents

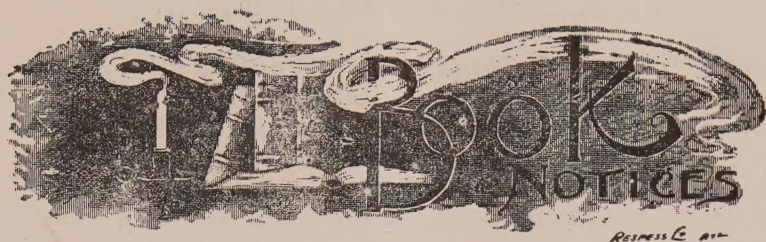


VERY many physicians make it a routine rule to administer ALETRIS CORDIAL in teaspoonful doses four times a day to all of their pregnant patients for several weeks during the latter part of gestation. Experience has taught them that ALETRIS CORDIAL not only prevents miscarriage, but also facilitates parturition.



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CANCER OF THE UTERUS—ITS PATHOLOGY, SYMPTOMATOLOGY, DIAGNOSIS AND TREATMENT; AND THE PATHOLOGY OF DISEASES OF THE ENDOMETRIUM. By Thomas Stephen Cullen, M. B. (Toronto), Associate Professor of Gynecology in John Hopkins University. With 11 Lithographic plates and over 300 colored and black illustrations in the text, by Max Brödel and Herman Becker. New York: D. Appleton & Co., 1900. Royal 8vo. Pp. 693.

This book is one which reflects much credit upon the publishers. Typographically, it is a beauty. The illustrations are as near perfect as those to be found in probably any book turned out from any publishing house in this country.

The author has had the opportunity of following gynecological work at the Johns Hopkins Hospital for the last seven years, and having made a systematic study of all cases having cancer of the uterus, or any disease that might be confused with cancer, is thoroughly qualified to present the profession a work of great value.

The author in the beginning chapters considers the anatomy of the uterus, both gross and histological.

Then the different varieties of carcinoma are considered in detail, their pathology, symptomatology, differential diagnosis and treatment being fully discussed in separate chapters.

Differential diagnosis of carcinoma of the body of the uterus is thoroughly treated, the author devoting about one hundred pages to this alone. The exhaustive manner in which this subject is treated, if the book contained nothing else, makes it an exceedingly valuable contribution to medical literature, and will, no doubt, give to it a large sale.

THE TREATMENT OF FRACTURES. By W. L. Estes, A. M., M. D., Director and Physician and Surgeon-in-Chief St. Louis Hospital, South Bethlehem, Pa.

This book describes the treatment of fractures in a practical and interesting manner and is replete with original drawings, photographs and skiagraphs. Printed upon heavy book paper and substantially bound in cloth, containing about 250 pages. Price, \$2.00.

ATLAS AND EPITOME OF DISEASES CAUSED BY ACCIDENTS.

By Dr. Ed. Golebiewski, of Berlin. Authorized Translation from the German, with Editorial Notes and Additions by Pearce Bailey, M.D., Consulting Neurologist to St. Luke's Hospital and the Orthopedic Hospital, New York, and to St. John's Hospital, Yonkers; Assistant in Neurology, Columbia University; Author of "Accident and Injury: Their Relations to Diseases of the Nervous System." 40 Colored Plates, and 143 Illustrations in Black. Price, \$4. Philadelphia: W. B. Saunders & Co.

This is a most excellent book of 549 pages. Its purpose is to present a systematic description of the sequels of injuries caused by accidents, and so thoroughly does it treat of these, that it is of value not only to medical practitioners, but to students. It is divided into two parts, one treating of injuries in general, the other of injuries affecting special structures and regions of the body. The colored plates are first-class, being copied from original water colors.

ATLAS AND EPITOME OF SPECIAL PATHOLOGIC HISTOL-

OGY. By Docent Dr. Hermann Durek, assistant in the Pathologic Institute; Prosector to the Municipal Hospital L. I. in Munich. Authorized Translation from the German. Edited by Ludwig Hektoen, M.D., Professor of Pathology in Rush Medical College, Chicago. With 62 Colored Plates. Price, \$3. Philadelphia: W. B. Saunders.

The purpose of this book is to give the student and practitioner such a knowledge of microscopic tissue changes or pathologic histology as will enable him to understand the nature of disease from changes shown in the elementary constituents of the body; or, to further the knowledge of the microscopic changes produced by disease.

This book is of special interest to all who are laboring to master pathologic histology by direct microscopic study.

THE TECHNIQUE OF SURGICAL GYNECOLOGY.

By Augustin H. Goelet, M.D., Professor of Gynecology in New York School of Clinical Medicine; Consulting Professor of Gynecology Electro-Therapeutics, International Correspondence Schools, Scranton, Pa., etc.

This book presents to the reader the technique of gynecological operations in a manner combining simplicity with completeness. The various subjects are individually discussed and graphically illustrated with a large number of drawings and sketches especially prepared. About 300 pages. Same price as above.

These two works are thoroughly practical and all details are carefully elaborated. Every general practitioner should possess a copy of each. Ready for delivery about September 25th. Published by the International Journal of Surgery Co., Medical Publisher, 100 Williams St., New York.

Abstracts.

UNCONSCIOUS ACCOUCHEMENTS.

Sr. Guillermo Serra (*La Semana Medica*, May 10th; *Independance Medicale*, July 4th) says that unconscious accouchement is now admitted to be possible even in healthy women, sound in mind and body, and this fact must be borne in mind in legal medicine. Among the most frequent causes are enumerated; multiparity of the woman, abnormally great pelvic dimensions, excessive development and exaggerated irritability of the muscular elements of the uterus, the absence of pains in the early period or even during the entire labor, as well as possible ignorance or misconception concerning pregnancy. In most cases several of these causes co-operate. A frequent factor is the sensation of an urgent need to urinate and defecate during labor, the efforts to satisfy this imaginary need at times inducing sudden accouchement without the woman experiencing any particular impression thereof. The author records a case of this character, in which one child was born in the night-chair, while a second was born immediately afterward on the patient getting to bed. The puerperium was normal. The case of the author's daughter is even yet more curious. She had conceived while suckling a previous child and did not experience any of the morbid symptoms usual in the early stage of pregnancy. She was quite unconscious of her condition. One night she summoned the author in consequence of abdominal pains which compelled her to keep her bed. The author prepared a calmative for her, returned home, but hardly had he arrived there when he was again summoned. The patient had pains in the genitalia, but before he could examine her the cry of the infant announced what had occurred. These unconscious accouchements must not be confounded with cases in which labor surprises the woman in the street or in a vehicle. The distinction between the two is of great medico-legal importance.—*N. Y. Medical Journal*.

ACUTE ANTERIOR POLIOMYELITIS IN AN ADULT DUE TO INFECTION.

There is accumulating evidence in favor of the view that acute anterior poliomyelitis is an infectious disease, though the actual demonstration of a causative micro-organism has not yet been made. Apart from the sudden onset of the disorder, sometimes with convulsions, often with diarrhea, and its febrile course, the occasional epidemic distribution of the cases especially is indicative of a bacterial agency in the etiology. The disease is most common in children, occurs but rarely in

adults and generally gives rise to flaccid, atrophic paralysis in one extremity, sometimes in both lower or both upper, and least commonly, in both the upper and the lower on the same side. A case where the disease occurred in an adult in hemiplegic distribution and was probably of infectious origin has recently been reported by Gumpertz. The patient was a robust merchant, 23 years old, who, during an attack of what possibly was typhoid fever, but which may have been merely the febrile state associated with acute anterior poliomyelitis, was seized with flaccid paralysis, wasting, diminution in electric irritability and in the reflexes, but without sensory alteration, in the upper and the lower extremity upon one side of the body. It was suggested that the presence of a furuncle upon the left buttock near the vertebral column may have been responsible for the development and the localization of the spinal disorder, through embolism or metastasis.—Journal of American Medical Association.

Dr. Louis S. Somers, of Philadelphia, in the *Annals of Otology, Rhinology and Laryngology*, Vol IX., No. 1, reports a case of cyst of the external auditory canal occurring in the course of suppurative otitis media of some months' duration. The cyst was attached at the junction of the cartilaginous with the osseous portion of the auditory canal on its superior surface, and was removed intact by snare under cocain anæsthesia.

Cystic tumors of the canal may originate in two ways: First, by the gradual accumulation within a pre-existing gland cavity of the products of its own secreting membrane. Secondly, by independent formation, in the tissues through softening and liquefactive changes, the material so produced compressing the cells in the immediate proximity, and these undergoing more or less fibroid change to form ultimately the cyst wall. A cystic tumor may also originate in rare cases by the formation of a fibrous tissue wall around any foreign body, such as a mass of coagulated blood, central liquefaction taking place.

New Orleans Polyclinic.—Physicians will find the Polyclinic an excellent means for posting themselves upon modern progress in all branches of medicine and surgery. The specialties are fully taught, particularly laboratory work. Fourteenth annual session opens November 12, 1900. For further information address Dr. Isadore Dyer, Secretary, New Orleans Polyclinic, New Orleans, La.